# NOTES ON CHASTA COSTA PHONOLOGY AND MORPHOLOGY

BY

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## INTRODUCTION.

In a large part of southwestern Oregon and contiguous territory in northwestern California were spoken a number of apparently quite distinct Athabascan dialects. The territory covered by tribes or groups of villages speaking these dialects embraced not only a considerable strip of Pacific coast[1] but also much of the interior to the east (Upper Umpqua and Upper Coquille rivers, lower Rogue river, Chetco creek and Smith river); some of the tribes (such as Tolowa and Chetco) were strictly coast people, others (such as Galice Creek and Umpqua or Ạkwa[2]) were confined to the interior. While some of the Athabascan dialects spoken south of the Klamath in California, particularly Hupa and Kato, have been made well known to students of American linguistics, practically nothing of linguistic interest has as yet been published on any of the dialects of the Oregon-California branch of Pacific Athabascan. It is hoped that the following imperfect and fragmentary notes on one of these dialects may prove of at least some value in a preliminary way.[3]

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[1] Outside of a few points in southern and southeastern Alaska (Cook Inlet, mouth of Copper river, Portland Canal) this is the only region in which Athabascan tribes have found their way to the Pacific.

[2] My ᶜ denotes nasalization.

[3] The material for these notes was secured in a very incidental manner. While the writer was at work on Takelma in the latter part of the summer of 1906, he was living with Mr. Wolverton Orton, a full-blood Chasta Costa Indian. At odd moments Mr. Orton and the writer whiled away the time with Chasta Costa.

The Chasta Costa (or *Cis/ta q!wᴧs/ta*) Indians, now gathered in Siletz Reservation in western Oregon, formerly occupied part of lower Rogue river; between them and the coast were other Athabascan tribes or villages of practically identical speech, above them to the east were the unrelated Takelma.[4]    Among these tribes of nearly or quite identical speech were the *Yū̇ᵘ/gwī* or Euchre Creek people, the *Tcê'/mê dᴧ/ne* or "Joshuas" of the mouth of Rogue river, the *Dū/t'u̇ dᴧ/nī*, the *Mī/k!u/nu̇ᵘ dᴧ/nī*, and the *GwᴧA/sá̇*.    All these formed a linguistic unit as contrasted with the coast people (*ā/γȯs/ta* "lower tribes") or, as they are now commonly called by the Indians of Siletz, "Sol Chuck" Indians, a Chinook Jargon term meaning "salt water, coast" people; the dialect of these coast tribes was probably identical to all intents and purposes with Chetco.    While Chasta Costa and Coast Athabascan are thus more or less distinct, they seem to have been mutually intelligible without very much difficulty, the coast dialect sounding merely somewhat "strange" and "drawn out" to a speaker of Chasta Costa.    At least three other Athabascan dialects of this region, however, seem to have differed so much from Chasta Costa as to be but partly understood, if at all, by speakers of the latter; these are Upper Umpqua, Upper Coquille, and Galice Creek.

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[4] It has already been pointed out (American Anthropologist, N. S., 9, p. 253, note 2) that there is reason to believe that J. O. Dorsey was incorrect in assigning the Chasta Costa villages above those of the Takelma (see his map in Journal of American Folk-Lore, III, p. 228).   On p. 234 Dorsey gives a list of Chasta Costa villages.

# PHONOLOGY.

## Vowels.

The vowels of Chasta Costa are *a*, *ā*, *e* (open as in English *met*), *ê* (long and open), *o* (close as in German *Sohn*), *ō*, *u* (apparently variant of *o*), *ū*, *i* (generally open), *ī*, and *ʌ* (like *u* of English *but*); *ô* (short and open as in German *voll*) sometimes occurs after velars as variant of *o* (*sxô/lă* "five," cf. Hupa[5] *tcwō/la*), *ä* (as in English *hat*) occurs after velars as variant of *e* (*tsxă/xe* "child," cf. Carrier[6] *œzkhéhkhe* "children").

Vocalic quantity is of considerable importance in Chasta Costa, not so much etymologically as phonetically. On the whole, long and short vowels interchange on regular mechanical principles; open syllables (that is, syllables ending in a vowel) with long vowel regularly shorten this vowel when the suffixing of one or more consonants to the vowel makes the syllable closed. Examples of *a* thus varying with *ā* are:

> *dō/yác/t!a* "I won't fly;" *dō/yát/t!a* "we won't fly" (cf.
> *dō/yă/t!a* "he won't fly")
> *dáθ/dā* "he is sitting down" (cf. *dā/θʌθ/dā* "I am sitting
> down")
> *tc!ásʟ/se* "he cries;" *tc!ácʟ/se/t‘e* "I shall cry" (cf. *tclā/θíl/se*
> "you cry")
> *tc!a/γásʟ/se* "they cry" (cf. *tc!a/γă/θil/se* "we cry")
> *nac/t!ŏ* "I swim" (cf. *nă/tc!ī/t!ō* "you bathe")

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[5] Hupa examples are taken from P. E. Goddard, "The Morphology of the Hupa Language," Univ. of Cal. Publ. Amer. Arch. and Ethn., 3.

[6] Carrier examples are taken from Rev. A. G. Morice, "The Déné Languages," Transactions of the Canadian Institute, I, pp. 170–212.

An example of *ê* shortened to *e* is:

*nés/ts!Aɬ/ī* "I am seen" (cf. *nê'/ts!Aɬ/ī* "he is seen")

Original long vowels may lose their quantity even in an open syllable, provided they are immediately followed or preceded by a syllable with relatively strong accent. Such are *tc!a-*, *na-*, and *ne-* in:

*tc!a/γȧ/θil/se* "we cry;" *tc!a/γásʟ/se* "they cry"
*ne/nȯ/ts!Aɬ/ī* "we are seen"
*ɬá na/dit/t!ō* "don't bathe;" (*na/dit/t!ō* is phonetically
    enclitic to strongly accented *ɬá*; contrast *nā/dít/t!ō/t'e*
    "you will bathe")

In general, however, stress accent cannot be said to be particularly well marked in Chasta Costa.[7] Each syllable is a fairly well-defined phonetic unit tending to hold its own against others, so that an approximately level accentual flow with but few peaks results. Such writings as *nā/dít/t!ō* and *tc!ā/θíl/se*, with apparent accent preceded by long vowels, are doubtless but imperfect renderings of forms with level stress on first and second syllables (they might perhaps better be written *nȧ/dìt/t!ō* and *tc!ȧ/θìl/se* with secondary accent on second syllable). It does not seem that every vowel in an open syllable is organically long; thus *e* in future *-t'e* and in *-de* of *t'wī/de* "everything" is regularly short. Many such cases are, however, probably only apparent, the short vowel being followed by a glottal stop; thus plural *ya-* of *ya/dAɬ/nī* "they make a sound" should doubtless be *ya'-*.

Short *a* of closed syllables is regularly reduced from long *ā*; original short *a* becomes *A* in a closed syllable. Examples of *A* thus dulled from original *a* are:

*t'Ac/yAc/t'e* "I shall go" (cf. *t'e/θíc/ya* "I go;" *-yAc* =
    Hupa *-yauw̱*)

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[7] Weak stress accent seems characteristic of Athabascan generally. Father Morice goes so far as to say, "there is no accent in Déné" (*op. cit.*, p. 173).

*nā/xʌn/dō* "eight, two less" (*nā/xʌ-* = Kato[8] *nąk/kaʿ* "two")

*dō/na/γʌct/xwī* "I do not vomit" (cf. *na/γå/θʌθt/xwī*[9] "I vomit")

*t'ʌl/dʌc* "he runs" (*-dʌc* = Hupa *-dauw̱*)

*γʌn/na/'ʌc* "he will bring" (*-'ʌc* = Hupa *-auw̱*)

*t'é/ʌn/γit/lʌɬ* "we are sinking" (cf. *t'e/nít/latʿ* "we drown;" Hupa *-lat*, *-la* "to float")

Not to be etymologically confused with this *ʌ* is inorganic *ʌ*. Whenever a consonant is not followed by a definitely determined vowel and yet, for some reason or other, is not phonetically appended to the preceding syllable, it must begin its own syllable and takes an inorganic, in other words etymologically meaningless, *ʌ*-vowel after it. This syllable may either be completed by a consonant of etymological value (such as first person singular *c*, verb class signs *ɬ*, *t*, *l*) never followed by a definite vowel or, if it is immediately followed by a syllable beginning with a consonant, this consonant is borrowed to complete the inorganic syllable (*-t* closes inorganic syllables preceding *d-*, *t!-*, *dj-*, *tc!-*, *ts!-*, *tθ!-*, *tcʿ-*, *ʟ!-*), so that a doubled consonant results of which the first half is of no etymologic significance. In some cases, however, as before *γ-*, and in rapid speech generally, this inorganic consonant is not always distinctly heard; yet in syllabifying words Mr. Orton completed such inorganic syllables with a consonant with mechanical regularity. These syllables with inorganic vowel and consonant are characteristic not only of Chasta Costa but also of Hupa and Kato and doubtless other Athabascan dialects as well. The general phonetic tendency to speak in definite syllables and the further tendency to limit short vowels to closed syllables explain these characteristic Athabascan

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[8] Kato examples are taken from P. E. Goddard, "Kato Texts," Univ. Cal. Publ. Amer. Arch. and Ethn., 5, 65–238; and "Elements of the Kato Language," ibid., 11, 1–176.

[9] *-ā-* may be secondarily lengthened from *-a-*.

developments.    The quality of the inorganic vowel varies
for different Athabascan dialects; it is $A$ ($\hat{u}$) in Kato as well
as in Chasta Costa, $i$ ($u$ before voiced or voiceless $w$, $\hat{u}$ or $e$
before post-palatal $k$-sounds) in Hupa, apparently $e$ in Galice
Creek, $æ$ (probably identical with our $A$) in Carrier.    Chasta
Costa $xAt/t'\acute{A}l/la\dot{t}$ "they sleep" is etymologically equivalent
to $x/t'/la\dot{t}$; $x$-, third person plural prefix, cannot stand alone
and is therefore followed by $A$ and $t$ borrowed from -$t'$-, while
-$t'$- (verb prefix $t'$- reduced from $t'e$-, therefore not capable of
combining with $x$- into $xAt'$-) in turn needs a syllabifying $A$
followed by $l$ borrowed from -$la\dot{t}$.    Other examples of inorganic
$A$, with and without following inorganic consonant, are:

$t'Ac/y\acute{A}c/t'e$ "I shall go" ($t'A$- = $t'$- reduced from $t'e$-)
$d\bar{o}/y\dot{a}/xAt/t!a$ "they won't fly" ($xAt$- = $x$-)
$n\bar{a}/x\acute{A}t/dAl/nic$ "they work" ($xAt/dA$- = $x/d$-, $d$- reduced
      from $de$-)
$d\dot{a}/xAn/nAt/t'Ac$ "they go to bed" ($xAn/nAt$- = $x/n$-)
$t'\acute{e}/An/\gamma Al/lA\dot{t}$ "he is sinking" ($\gamma Al$- = $\gamma$-)

Many syllables with final consonant and $A$- vowel must
be considered as radical or at least unanalyzable elements.
In not all such cases is $A$ a reduced form of $a$; where $A$ seems
a primary vowel, as shown by comparison with other Atha-
bascan dialects, it seems best to consider it an organic element
in the syllable, though it remains plausible that at last analysis
it is but a reduced form of some fuller vowel.    Thus, while
-$yAc$ has been shown to represent an original -$yac$ (Hupa -$yau\underline{w}$),
-$t'Ac$ contains a primary $A$, as shown by comparison with Hupa
-$t\bar{u}\underline{w}$ "to lie down" (ultimately -$t'Ac$ is doubtless -$t'$, reduced
from -$t'e$, and suffix -$c$).

Inorganic $A$ sometimes becomes palatalized to $i$, though
there is not enough material available to make it certain just
when this change takes place.    Examples of this secondary
$i$ have been found before $c$ (but not before its developments
$s$ and $\theta$) and $s$ derived from $tc$ (but not before original $s$ or its

development) when itself preceded by $m$, $n$, or $\theta$ (preceding $\gamma$, however, tends to preserve $A$). Examples are:

> $mís/ki^{10}$ "gull" (cf. Kato $bûtc/k'ai^{\epsilon}$)
> $níc/ya$ "I come" ($nic$- = cessative $n$- and first person singular $c$)
> $níc/dac$ "I dance"
> $t'e/níc/łat$ "I drown"
> $t'e/\theta íc/ya$ "I go" ($\theta ic$- = durative $\theta$- and proncminal $c$; cf. $t'é\theta/ya$ "he goes" without vowel after $\theta$)
> $tc!_A\gamma/\gamma e/\theta íc/ya$ "I eat"
> $\gamma e/\theta íc/\bar{\iota}$ "I saw him" (cf. $c/\gamma é\theta/\bar{\iota}$ "he saw me")
> $\theta ícł/s\bar{\iota}$ "I let him"

With $-\theta ic$- contrast $-\theta_A\theta$- (both from original *$-s_Ac$-) in $d\bar{a}/\theta_A\theta/d\bar{a}$ "I am sitting;" with $-\theta icł$- contrast $-s_Asł$- (from original $-$*$s_Acł$- and $-$*$s_Acl$- respectively) in $tc!\bar{a}/s_Asł/se$ "I am crying." $-\gamma ic$- was heard in $y\bar{a}/\gamma íc/t!a$ "I fly," but as this is an isolated example (contrast $-\gamma_Ac$- in $ná/da/\gamma_Act/t!\bar{o}$ "I bathe" and $-\gamma_Acł$- in $\gamma_Acł/_Az$ "I sneezed"), it seems possible that this form was misheard for $y\bar{a}/\gamma_Ac/t!a$. Besides $-nic$- also $-n_Ac$- is met with: $d\dot{a}/n_Ac/t'_Ac$ "I go to bed" and $n\bar{a}/n_Ac/_An$ "I stop him;" it is probable that in these forms $-n_A$- is a reduced form of $ne$- (cf. Hupa $tcin/ne/t\bar{u}\underline{w}$ "she goes to bed") and thus not directly comparable with $-ni$- of $-nic$-. Unaccented $A$, itself reduced from $a$, has in one case ($-y_Ac$ "to go") been found further palatalized to $i$: $d\bar{o}/t'_Ac/yic$ "I'll not go," $łá/t'\bar{\iota}/yic$ "don't go!" (cf. $t'_Ac/y_Ac/t'e$ "I shall go"); this $-yic$ contracts with directly preceding $t'_A$- into $-t'_Ac$: $d\bar{o}/t'_Ac$ "he won't go."[11]

Original Athabascan $ai$ has in Chasta Costa become monophthongized to $\bar{\iota}$. Examples are:

> $ł/g\bar{\iota}$ "white" (cf. Kato $L/gai$)

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[10] Should probably be $mískłi'$.

[11] With this $-t'_Ac$ Kato $ta/cac$ in $d\bar{o}/ta/c\bar{o}^{\epsilon}$ $ta/cac$ "not anywhere I went" (P. E. Goddard, "Kato Texts," Univ. Cal. Publ. Amer. Arch. and Ethn., 5, No. 3, p. 182, l. 17) is in striking agreement.

> *mis/k!i'*[12] "gull" (cf. Kato *bûtc/k'ai$^\epsilon$*)
> *hī$^i$*[13] demonstrative "that" (cf. Hupa *hai*)

*au* as organic diphthong seems to occur but rarely in Athabascan. If *dō* "no!" (cf. Hupa *dau*) may be regarded as distinct from adverbial *dō* "not" (cf. Hupa *dō*), we would have an example of the parallel development of *au* to *ō* in Chasta Costa. Certain contractions that take place between *i* of first person plural -*it*- and second person plural -*ō*- with preceding vowels will be spoken of in discussing the pronominal prefixes.

One of the most striking phonological characteristics of Chasta Costa is the disappearance of an original *η*[14] or of its representative, nasalization of preceding vowel. Its former presence can always be proved by comparison with other Athabascan dialects that, like Hupa, still preserve it. In the case of all vowels but inorganic *A* nasalization has left no trace whatever, original *ą* (from *āη*), *ę̂* (from *êη*), and *į̄* (from *īη*) being reduced to *ā*, *ê*, and *ī*; originally short vowels, on losing their nasalization and thus coming to stand in an open syllable, become lengthened, while originally long vowels in a closed syllable not only lose their nasalization but are shortened. Thus, a syllable *sī* may represent an original *sį̄* (or *sīη*) or *sį* (or *siη*), while *sil* may go back as well to *sį̄l* as to *sįl*. Examples of the absolute disappearance of an original *η* are:

> *nȧ/xe* "you paddle" (*nā-* = *\*ną-*, cf. Hupa *nûñ/ya* "you
>     are about")
> *dō/yȧ/t!a* "you won't fly" (*yā-* = *\*yą-*, cf. Hupa *yûm/mas*
>     assimilated from *\*yûñ/mas* "you are rolling over")
> *tc!ál/se/t'e* "you will cry" (*tc!al-* = *\*tc!ą-l-*; cf. *tc!áɫ/se/t'e*
>     "I shall cry" with -*c*- "I" morphologically parallel
>     to -̗- "you")

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[12] *ī* is here shortened to *i* because of following glottal stop.

[13] *ī$^i$* denotes long *ī* with weakly rearticulated parasitic *i*. Such "pseudo-diphthongs" sporadically occur in Chasta Costa in lieu of ordinary long vowels.

[14] i. e., *ng* of English *sing*.

ła/na/γat/xwī "don't vomit!" (γat- = *γa̧t-, cf. γā- from
  *γa̧- in na/γå/θit/xwī "you are vomiting")

néł/ī "you are looking at him" (neł- = *nȩł- ; -ī = -'i̧,
  cf. Kato -īñɛ "to see")

łī "dog" (original Athabascan *łi̧, *łi̧η; cf. Hupa Liñ,
  Montagnais l'i̧η, Hare tl'i̧η, Loucheux l'éη, Carrier
  łi, old form łœⁿn[15])

Nasalized inorganic ₄ seems to have acquired a palatal
coloring i; this i then regularly developed to ī in open, i in
closed syllables. It thus often seems as though Chasta Costa
ī, i is the morphologic equivalent, for instance in second person
singular forms, of Athabascan η, an equivalence, as has just
been shown, due to secondary phonetic developments. Examples
of ī < i̧ < ₄ are:

t'e/θi̧/ya "you go" (θī- = *s₄- ; cf. Hupa na/siñ/ya "you
  are going about")

ni̧/dac "you dance" (nī- = *n₄-; cf. Hupa niñ/yauw̲
  "go!")

yu̇/wīs dī/nī "you whistle" (dī- = *d₄-; cf. Hupa da/din/La
  "run!" assimilated from *da/diñ/La

nå/tc!ī/t!ō "you swim" (tc!ī- = *kʸ!₄-;[16] cf. Hupa na/kiñ/-
  yûñ "come eat!")

yā/γi̧/t!a "you fly" (γī- = *γ₄-; cf. Hupa ye/wiñ/ya "you
  are going in")

yā/γi̧/t!a "it flies" (γī- = *γ₄-; cf. Hupa na/win/ṭau "it
  will settle down" assimilated from *na/wiñ/ṭau)

t'i̧/łał "you are sleeping" (t'ī- = *t'₄-; cf. Hupa tiñ/xauw̲/ne
  "you take along")

verb stem -sī "to make" (cf. Hupa -tcwiñ)

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[15] Morice, op. cit., p. 210. Carrier has evidently undergone a development parallel
to that of Chasta Costa. All northern Athabascan forms except Carrier (and Chipewyan)
are taken from R. P. E. Petitot, "Dictionnaire de la langue Dènè-Dindjié."

[16] kʸ! is "fortis" palatal k, Hupa k₁, Morice's q.

Examples, in closed syllables, of $i < \underline{i} < \underline{A}$ are:

> $tc!\bar{a}/\theta\acute{\imath}l/se$ "you cry" $(\theta il\text{-} = {}^*s_{A}\text{-}l\text{-};$ cf. Hupa $na/d\bar{u}/we/\text{-}sil/en/$[17]

> $n\bar{a}/d\acute{\imath}t/t!\bar{o}/t'e$ "you will bathe" $(dit\text{-} = {}^*d_{A}\text{-}t\text{-};$ cf. third person $n\bar{a}/d_{A}t/t!\bar{o}/t'e)$

> $t'\bar{a}/\gamma\acute{\imath}t/n\bar{a}$ "you drink" $(\gamma it = {}^*\gamma_{A}\text{-}t\text{-};$ cf. third person $t'\bar{a}/\gamma_{A}t/n\bar{a})$

> $y\bar{a}/\gamma\acute{\imath}l/g_{A}\theta$ "you climb" $(\gamma il\text{-} = {}^*\gamma_{A}\text{-}l\text{-};$ cf. third person $y\bar{a}/\gamma_{A}l/g_{A}\theta)$

> $t'\acute{\imath}l/xw_{A}\theta$ "you cough" $(t'il\text{-} = {}^*t'_{A}\text{-}l\text{-};$ cf. third person $t'_{A}l/xw_{A}\theta)$

> $ne/cil/\bar{\imath}$ "look at me!" $(cil\text{-} = {}^*c_{A}\text{-}l\text{-})$

Hupa -$\tilde{n}$ (that is, our $\eta$) seems at times to correspond to Chasta Costa -$n$, but comparison with northern Athabascan dialects indicates that in such cases we are dealing with original -$n$. Thus, $n_{A}n$ "you," despite Hupa $ni\tilde{n}$, is shown to have original -$n$ by Montagnais $nen$ and Loucheux $nan$; $d_{A}n/tc!i$ "four," Hupa $di\tilde{n}k$ ($=di\eta k^y!$), does not go back to original ${}^*d_{A}/k^y!i$ but to ${}^*d_{A}n/k^y!i$ or ${}^*d_{A}\eta/k^y!i$ ($\eta$ assimilated from $n$), as evidenced by Loucheux $tan$; $ta/c_{A}n$ "black" corresponds to Loucheux $del\text{-}zen$; similarly, $d_{A}n$ "in, at" must have original -$n$ despite Hupa $di\tilde{n}$ and Kato $d\hat{u}\tilde{n}$ (original ${}^*d_{A}$ would have given Chasta Costa ${}^*d\bar{\imath}$).

## Consonants.

The consonantal system of Chasta Costa, like that of most Athabascan dialects, is characterized by a lack of labial stops, though $m$ is common; $b$ has been found in $b\bar{o}/\theta i$ "cat," a loanword from English *pussy*, but seems not to occur in native words (yet cf. $tc_{A}/p\mathring{a}/yu$ "flower"). The consonants of Chasta Costa are: the labial nasal $m$; the dental stops $t'$, $d$, $t!$, and dental nasal $n$; the back stops $g$, $q'$ (or $q\mathring{x}$), $q!$, voiceless spirant

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[17] In Hupa $\tilde{n}$ (or nasalization) disappears in closed syllables. In such forms Chasta Costa is etymologically more transparent than Hupa insofar as -$i$- is a reflex of original -$\underline{A}$-, whereas Hupa -$i$- is the normal inorganic vowel.

*x* (as in German *Bach*), and voiced spirant γ (as in North German *Wagen*); the labialized back stops *k'w*, *gw*, *q!w*, and spirant *xw* (sometimes weakened to *hw*); the sibilants *s*, *c* (as in English *ship*), θ (as in English *thin*), and *z* (voiceless lenis, intermediate between *s* and English *z*, heard in -*Az* "to sneeze"); the affricative palatal consonants *tc'*, *dj*, and *tc!*; the affricative alveolar consonants *ts*, *ts!*, and affricative. dental consonant *tθ!*; the laterals *l*, *ł* (voiceless spirantal *l*, with *L*, dorsal *t* followed by *ł*, as variant), and *L!*; the glottal stop (*'*); the aspirate *h* (' at the close of a syllable); and the semivowels *y* and *w*.

Of these *t'*, *q'*, *k'w*, and *tc'* (English *ch*) are aspirated surds (*k'* is not found, *k'w* has been found but once and may be considered of doubtful occurrence); (*b*), *d*, *g*, *gw*, and *dj* are voiceless but lenis, intermediate acoustically between surds and sonants[18] (*dj* is intermediate between English *ch* and *j*); *t!*, *q!*, *tc!*, *ts!*, *tθ!*, and *L!* are so-called "fortis" consonants, in other words, they are pronounced with simultaneous closure of glottis but are released before the release of the glottal chords. *q'*, *q!*, *gw*, and *q!w* (*g* has not been found, but very likely exists) are velar consonants; *k!* has not been found,[19] its place being taken by *q!*.[20] Of secondary origin are syllabically final *t* and *k*, which may be considered as voiceless stops differing from *t'* and *k'* in their lack of aspiration; they are etymologically equivalent to *d* and *g*. It is highly probable that also *w*, which does not frequently occur, is but a secondary development or acoustic variant of γ after *o*-vowels;[21] after *o*-vowels γ becomes labialized to γ[w], in which both γ and *w* elements are so weak that one is constantly in doubt as to whether he hears

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[18] It is possible that these "intermediate" stops are sonant at their moment of release.

[19] Unless, as seems possible, *k* of *mis/ki* "gull" was misheard for *k!*.

[20] *q!* corresponds to Hupa *k₃*, *g* is Hupa *k₂*. *q!* is by no means as forcible a sound as is, e. g., Chinookan *q!*. There is something decidedly illusive about it; the velar stop element seems to be reduced to a minimum, the glottal catch element is very strongly marked, and a weak *x* seems at times to precede the velar stop (e. g., *ˣq!ā/xAθ* "arrow"). Despite my familiarity with Chinookan *q!*, I did not often succeed in pronouncing Chasta Costa *q!* so as to satisfy Mr. Orton's ear. It may well be that *q!* is really "fortis" or glottalized *x* (*x!*); cf. Tlingit *s!*.

[21] In Hupa γ has become *w* in every case.

γ or *w* (thus *dō/γe-* becomes *dō/γʷe-*, *dō/ᵞwe-*; similarly, what was heard as *dō/wa-* may really be *dō/γʷa-*). However, *w* occurs also in *sā'/wʌs/ts!é* "sandhill crane;" *wʌs/xé* "good."

This consonant system is only in part a faithful representative of the original Athabascan system. Some consonants have become merged with others, while other consonants have kept distinct but have been changed in regard to place of articulation. Chasta Costa *m*, *t'*, *d*, *t!*, *n*, *g*, *q!* (*k!*), *q!w*, γ, *l*, *ł*, *ʟ!*, *'*, *h*, and *y* seem in practically every case to correspond to these same Athabascan sounds.

Athabascan *k'*, as also in Hupa, has become *x* in Chasta Costa:

> *xā'/tc'ú* "goose"[22] (cf. Hupa *xa*[23]; Applegate Creek *k'ą'/-
> tc'u*; Kato *k'a'*)
> *nå/xi* "two" (cf. Hupa *nax*; Montagnais *nak'é*[24])
> *ts!å/xe* "woman" (cf. Carrier *tṣèkhè*[25])
> *tsxå/xe* "child" (cf. Carrier *œzkhéhkhe*)

Analogously to this change of *k'* to *x*, original Athabascan *k'w* has become *xw* (sometimes heard as *hw*) in Chasta Costa. This sound is preserved as such in Kato (*k'w*) and Chasta Costa (*xw*), but seems generally to have fallen together in other dialects with original *k'*. Examples are:

> *hwä* "foot" (cf. Kato *kweᵋ*; Carrier *ne-khé*; Loucheux *œkρè*)
> *na/γå/θʌθt/xwi* "I vomit" (cf. Carrier *khu* "vomiting")

It seems, however, to persist as *k'w* in:

> *k'wʌs/t'å/ne* "six" (cf. Hupa *xōs/tan*)

Etymologically but not phonetically distinct, both in Hupa and Chasta Costa, from these secondary *x* and *xw* are

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[22] *-tc'u* is augmentative.
[23] See Goddard, "Kato Texts," note 32.
[24] Petitot's ' represents aspiration.
[25] Father Morice represents "fortis" stops by means of points below characters.

original Athabascan *x* and *xw*.   A good example of the latter is:

-*xwʌθ* "to cough" (cf. Carrier *xwœs* "cough," as noun)

Athabascan sibilants and sibilant affricatives (*ts* and *tc* sounds) have undergone various modifications in Chasta Costa.   Original *s* has regularly become *θ*:

θʌ/γʌ̇ɫ "grizzly bear" (cf. Carrier *sœs-eᴸœɫ* "brown bear")
*t'e*/θíc/*ya* "I go" (cf. Hupa *te*/*sē*/*ya*/*te* "I am going away")
*t'éθ*/*ya* "he goes" (cf. Hupa *tes*/*ya*/*te* "it is about to come")
-*gʌθ* "to climb" (cf. Hupa -$k_2{}^a s$)
-*xwʌθ* "to cough" (cf. Carrier *xwœs*)

Before *ɫ* (or its variant *L*), however, *s* is regularly retained:

*ts!ā*/*sʌsL*/*se*[26] "I cry;" *tc!ásL*/*se* "he cries;" *tc!a*/γ*ásL*/*se*
  "they cry" (with these forms contrast *tc!ā*/θ*íl*/*se*
  "you cry")
*na*/*yésL*/*sī* "he tells" (contrast *nā*/θ*íɫ*/*sī* "you tell")
*cʌsɫ*/*sī* "he lets me" (contrast θ*ícɫ*/*sī* "I let him")
*cʌsɫ*/*t'ăɫ* "he kicks me" (contrast θ*ícɫ*/*t'āɫ* "I kicked him")
*q!wʌt*/*dasL*/*nă̇* "it was lying on it"

Athabascan *ts* would, by analogy, have been expected to develop into *tθ* (as in Chipewyan), but *θ* seems to be regularly found instead:

θ*ī* "head" (cf. Carrier *n-tsi* "your head;" Montagnais
  -*thi*;[27] Hare -*kfwi*; Loucheux -*tchi*[28].   Kato -*sī*ᵋ "head"
  seems to indicate that in Kato also, at least initially,
  *s* and *ts* fell together.
θʌ/γ*á* "hair of head" (cf. Montagnais *éthi-ρa*[29])

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[26] -*sʌsL*- is assimilated from *-*sʌcL*-, -*s*- being here prevented from becoming -*θ*- because of following -*s*- (before *L*) of same syllable.
[27] i. e., -*tθi*.   Petitot's *th* is *tθ*.   In Hare *ts* (or its reflex *tθ*) developed into what Petitot writes *kfw*, perhaps to be understood as *kφ*, i. e., *k* plus bilabial *f*.
[28] Petitot's *tch* is our *tc*.
[29] Petitot's *ρ* is *γ*.

ł/θo "yellow, green" (cf. Montagnais *del-thoρ* "yellow;"
Hare *dé-kfwoy* "yellow," Hupa ʟ*it-tso* "green;" Kato
ʟ-*tso* "blue")

In some cases *ts* seems to have become *s*:

*sê* "stone" (cf. Kato *se*; Hupa *tse*; Montagnais *thè*; Hare
*kfwè*; Loucheux *tchi*; Carrier *tsé*)

As might be expected, Athabascan *ts!* has regularly become
*tθ!* in Chasta Costa:

*dā/de/θíl/tθ!i* "we are sitting" (cf. Hupa *na/ya/del/tse,*
i. e., -*ts!e,* "they lived as before")
*tθ!ʌθ/dā* "story"

Athabascan *c* is normally preserved as such (e. g., *cī* "I").
However, it is assimilated to *s* before *s* and *ts!*:

*s/ts!i/dè* "my sickness" (*c*- "my")
*nés/ts!ʌł/ī* "I am seen (-*c*- "I")
ʌ*s/sé/t'e* "I shall cry" (from *ʌc*-)
*s/ts!ʌn/na/'ʌc* "he will bring it to me" (*c*- "me")

Assimilation of *\*sʌc* to *sʌs* has taken place in:

*tc!ā/sʌsʟ/se* "I cry" (cf. *tc!ácʟ/se/t'e* "I shall cry")

Original *\*sʌc* > *\*sic,* however, regularly developed to *θic*:

*tc!ʌγ/γe/θíc/ya* "I eat"

Original *\*sʌc,* after being assimilated to *\*sʌs,* regularly shifted
to *θʌθ,* unless, as we have seen, it was protected by immediately
following *ł*:

*dā/θʌθ/dā* "I am sitting" (from *\*dā/sʌc/dā*)
*t'e/θʌθ/lał* "I have been sleeping" (from *\*t'e/sʌc/lał*)
*tc!eθ/t!ŏ* "I swim across" (probably misheard for *tc!e/θʌθ/t!ŏ*)

Original *s,* when immediately following *c,* also causes it to
assimilate; *ss,* which thus results, is then regularly shifted to
*θθ*:

*yā/γʌθ/θeł* "I threw" (from *\*yā/γʌc/seł*)

Athabascan *tc* (sometimes *tcw*?) is not retained in Chasta Costa, but appears regularly as *s*:

ɬ/s_Ak_ "red" (cf. Kato _L/tcīk_; Loucheux *ditssig*)[30]

*mís/k(!)i(')* "gull" (cf. Kato *bûtc/k'ai^*)

*sā'/w_As_/ts!é* "sandhill crane" (cf. Applegate Creek *tcā'/-wác/tc(!)e*)

*-sī* "to make" (cf. Hupa *-tc̆wiñ*; Kato *-tcī*; Chipewyan *-tsī̆*[31])

*-se* "to cry" (cf. Chetco *-swe*; Hupa *-tcwen*; Kato *-tce^*; Carrier *-ssâ*)

Chasta Costa *sx* is found in:

*sxô/lă* "five" (cf. Hupa *tcwō/la*; Chipewyan *sa/sō/la/yai^*)

Athabascan *tc!* remains, *tc!* often being shifted, however, to *ts!* (or *s'*[32]):

*tc!e-* verb prefix "across the water" (cf. Hupa *tce-*, i. e., *tc!e-*, "down to the beach, out of the house;" Kato *tc'e-*; Chipewyan *ts'e-* "to a body of water")

*-ts!_An_* "toward, to" (cf. Hupa *-tciñ*, i. e., *-tc!iŋ*; Kato *-tc'ûñ^*; Chipewyan *-ts'ûn*)

*ts!ĭ/de* "sickness" (cf. Loucheux *tssik*, i. e., *ts!ik*)

*-s'at^* "to be hurt" (cf. Hupa *-tcat*, i. e., *-tc!at*, "to be sick, to become ill")

There is still another set of sibilants in Chasta Costa, which go back to original palatalized (anterior palatal) *k*-sounds (*g^y*, *k^y*, *k^y!*). In Kato, Navaho, Apache, Chipewyan, and other Athabascan dialects, as in Chasta Costa, these have become affricative sibilants, without, however, falling together, as a rule, with the original Athabascan *tc-* consonants. In Chasta Costa, *k^y* has become *tc'*, *k^y!* has become *tc!* (this *tc!*

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[30] Petitot's *tss* is our *ts!*.

[31] Chipewyan forms are taken from P. E. Goddard, "Analysis of Cold Lake Dialect, Chipewyan," Anthr. Papers Amer. Mus. Nat. Hist., vol. X, pt. II. Chipewyan forms taken from Petitot are referred to as Montagnais.

[32] It is quite likely that *tc!* and *ts!* are here merely auditory variants of *tś!* (*ś* is midway between *s* and *c*). In Kato *tc'*, *ts'* and *s'* also interchange.

does not vary, apparently, with *ts!*); for $g^y$ I have no examples. Chasta Costa and Chipewyan are largely parallel in their development of Athabascan *ts*, *tc*, and $k^y$ sounds:

| Athabascan | Hupa | Chasta Costa | Chipewyan |
|---|---|---|---|
| *dz* | | | *dϑ, ϑ* |
| *ts* | *ts* | *θ* | *tθ, θ* |
| *ts!* | *ts!* | *tθ!* | *tθ!, θ'* |
| *dj* | *dj* | | *dz* |
| *tc* | *tc(w)* | *s* | *ts* |
| *tc!* | *tc!* | *tś!, ts!* | *ts!* |
| $g^y$ | $g^y$ | | *dj* |
| $k^y$ | $k^y$ | *tc* | *tc* |
| $k^y!$ | $k^y!$ | *tc!* | *tc!* |

There are thus three distinct series of sibilant affricatives (and of sibilants) in Chasta Costa and Chipewyan, none of which is in direct accord with the original Athabascan sounds; Hupa, it is highly important to note, reflects the original sounds almost exactly.[33]   Carrier, it would seem, has also preserved the $k^y$-series.

Examples of Chasta Costa *tc'* from original $k^y$ are:

*áʟ/tcā/γĭ* "big thing" (cf. Hupa *-kya/ō* "large;" Kato *-tca^y, -tca'* "to be large")

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[33] In his "Analysis of Cold Lake Dialect, Chipewyan," Goddard treats Chipewyan *ts* and *tc* as though they were one sound corresponding to Jicarilla and Navaho *tc* (p. 86). Examination of the various illustrative forms scattered throughout the paper, however, soon convinces one that Chipewyan *ts*, *dz*, and *ts!* correspond respectively to Hupa, Jicarilla, and Navaho *tc(w)*, *dj*, and *tc!*; whereas Chipewyan *tc*, *dj*, and *tc!* correspond respectively to Southern Athabascan *ts*, *dz*, and *ts!* and to Hupa $k^y$, $g^y$, and $k^y!$. Thus, the Southern Athabascan *ts*- sounds represent both original *ts*- sounds and $k^y$- sounds; perhaps there is a phonetic difference that does not come out clearly in the orthography.

As for Kato, Goddard finds no difference between *tc*- sounds that go back to original *tc*- sounds and those that correspond to Hupa $k^y$- sounds ("Elements of the Kato Language," pp. 16, 51). However, deictic *tc'*-, corresponding to Hupa *tc!*-, varies with *ts'* and *s'*, thus suggesting *tś!* as the true sound; on the other hand, *tc'*- (to indicate indefinite third personal object) corresponding to Hupa $k^y!$- occurs consistently as *tc'* (contrast examples of *tc'*-, *ts'*-, *s'*- on p. 50 with those of *tc'*- on p. 51). It seems plausible, then, that in Chipewyan, Chasta Costa, and Kato original $k^y$- sounds became true *tc*- sounds; while original *tc* sounds were shifted to *tś*- sounds (which are apt to be heard as either *ts*- or *tc*- sounds).

-*tc'u* augmentative suffix (e. g., *łiⁱ/tc'ù* "horse," literally "big dog") (cf. Hupa -*kyō*; Kato -*tcō*)

Examples of *tc!* going back to Athabascan *kʸ!* are:

*dAn/tc!i* "four" (cf. Hupa *diñk*, i. e., *diŋkʸ!*)

*stc!At/dé* "seven" (cf. Hupa *xō/kit*, i. e., -*kʸ!it*)

*tc!ásʟ/se* "he cries" (cf. Hupa *kya/teʟ/tcwū* "it cried, i. e., *kʸ!a-*)

*tc!-* verb prefix indicating indefinite object (cf. Hupa *k-*, *ky-*, i. e., *kʸ!-*; Kato *tc'-*)

Athabascan possessed sonant sibilants (*z*, *j*) and sibilant affricatives (*dz*, *dj*). Of these sounds *z* has been found in Chasta Costa -*Az* "to sneeze;" *dj* is illustrated in several forms, but, as we shall see in a moment, does not in these go back to Athabascan *dj*. *dz* has not been found, though it may exist. *j*, as in Kato and Hupa, has become *c*:

*ła/cAn* "black" (cf. Hupa *ʟū/hwin* < *-cin*; Kato *ʟ/cûnᵋ*; Jicarilla *ʟī/zī*; Nav. *ʟī/jin*; Chipewyan *del/zûn*; Loucheux *del-zen*)

Chasta Costa *dj* results from *t* (unaspirated) plus *y*:

*q!wAt/tc!At/dja* "table" ( < *q!wAt/tc!At/ya* "whereon one eats;" -*ya* "to eat")

*ya/da/γít/dja* "we are ashamed" ( < *ya/da/γít/ya*; cf. *yAc* in *ya/dAcł/yAc* "I am ashamed")

Of the lateral consonants, only three (*l*, *ł*, and *ʟ!*) have been found in Chasta Costa. Original *dl* may have been preserved also, but Athabascan *dlō* was heard rather as *t* (unaspirated) plus *lō*:

*γAct/lō* "I laugh" (cf. Chipewyan -*dlō*, -*dlōk'* "to laugh") -*t*- is very probably third modal -*t*- here; while -*dlō* really appears as -*lō*. After *c* and *s*, *l* becomes *ł*:

*nā/dAcł/nic* "I work" (cf. *nā/dAl/nic* "he works")

*nǎ/xwAcł/ye* "I play" (cf. *nā/xwAl/ye* "he plays")

*q!wAt/dasʟ/nā* "it was lying on it"

# MORPHOLOGY.

## PRONOUNS.

Independent personal pronouns:

*cī* "I"

*nAn* "you"

*yū* "he, that one"
(really demonstrative)

*nê* "we" (probably contracted from \**ne/he*; cf. Hupa *ne/he*)

*nȯ/nè* "you" (plur.)

*yủ/nè, yún/nè* "they, those"
(really demonstrative)

Examples of possessive pronouns are:

*cíc/la* "my hand" (*cic* is independent *cī* combined with possessive prefix *c-*; literally, "I my-hand")

*nÁn/la* "your hand" (that is, *nAn n-*, "you your-hand")

*hi la* "his hand" (*hī* is demonstrative)

*c/na/γǎ* "my eyes"

*s/ts!ĭ/dè* "my sickness, I am sick"

*n/ts!ī/dé* "you are sick"

*nō/ts!ī/dé* "our sickness, we are sick"

*nō/ts!ī/dé/ha* "your (pl.) sickness? are you (pl.) sick?"
(-*ha* is interrogative)

*xȯ/ts!ī/dè* "their sickness, they are sick"

Many nouns, when limited by preceding possessive pronouns, suffix -*e*, as regularly in Athabascan. Thus, from *mAn* "house:"

*cíc/mAnè* "my house"

*nÁn/mAne* "your house"

A noun followed by another with suffixed -*e* is to be understood as genitively related to it. Examples are:

*dAnê' lī/tc!e* "person's dog" (*lī/tc!e* from *łī* "dog," with

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voicing of *ł-* to *l-*; cf. Hupa *Liñ* "dog," *xō/liñ/ke*,
i. e., *xō/liŋ/kʸ!e* "his dog")

*tʌkʌ́c*[34] *ʟ!ōᵘ/le* "bowstring" (literally, "bow's string;" cf.
Chipewyan *ʟ'ū ʟ* "rope," possessed form *ʟ'u/le*)

*gȧ/yu ts!ɨ̇/de* "baby's sickness, baby is sick"

As reflexive possessive is used *xā/dʌt-* (with *-ā/dʌt-* cf.
Hupa *a/d-*; Carrier *ædæd-*):

*xȧ/dʌt/lī/tc!é* "his own dog" (used reflexively)

Of demonstrative pronouns there have been found:

*hɪ̄ⁱ* "that, he" (cf. Hupa *hai*, indefinite demonstrative and
article); *hɨ̇ⁱ/t!i* "that thing"

*yū* "that one" (cf. Hupa *yō* "that")

*yȧ/ne, yún/ne* "those, they"

*m-* "it" (cf. Hupa *m-*; Kato *b-*): *mʌł* "with it"

*de* seems to be used as relative in:

*dé ucʟ/tʻe* "what I want"

This element is perhaps demonstrative in force and related to
Hupa *de* in *ded* "this," *hai/de* "this."

Totality is expressed by *tʻwī* "all, everything" (cf. Hupa
*a/tiñ* "all"). Compounded with this element are:

*tʻwī/dé* "everything" (*-de* is very likely related to Hupa
*di-* in *dī/hwo̱* "something," *dī/hwe̱/e* "nothing")

*dȯ/tʻwī/dè* "not everything"

*tʻwɨ/dʌn* "everywhere" (literally, "all-at;" cf. Hupa *a/tin/-
diñ* "every place")

## Nouns.

Primitive non-descriptive nouns, as in all Athabascan dia-
lects, are relatively frequent in Chasta Costa. Monosyllabic
nouns are:

Body Parts.

*la* "hand" (cf. Hupa *-la*; Kato *-laᶜ*)

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[34] Probably to be understood as *i'ʌk/gʌ́c*.

*hwä* "foot" (cf. Kato -*kwe*ᵉ; Chipewyan -*ke*)

*θī* "head" (cf. Kato -*sī*ᵉ; Chipewyan -*θī*, -*tθī*)

-*γa* "hair" (in *θʌγá* "head-hair;" cf. Kato -*ga*ᵉ "hair;" Chipewyan -*Ga*, i. e., -*γa*)

ANIMALS.

*tc!ac* "bird"

*łī* "dog" (cf. Hupa *Liñ*; Chipewyan *Lī*)

NATURAL OBJECTS.

*sê* "stone" (cf. Hupa *tse*; Kato *se*)

*cā* "sun" (cf. Hupa *hwa*; Kato *ca*)

*łʌt* "smoke" (cf. Hupa *Lit*; Kato *Lût*)

CULTURE OBJECTS.

*mʌn* "house" (cf. Hupa diminutive *min-tc* "hut")

*L!eł* "matches" (originally doubtless "fire-drill;" cf. Chipewyan *L'eL* "fire-drill")

*gōθ* "camass" (cf. Hupa *kos* "bulbs")

*L!ō"l-è* "(its) string" (cf. Hupa *LōL* "strap;" Chipewyan *L'ūL* "rope")

Primitive, at any rate not easily analyzed, nouns of more than one syllable are:

PERSONS.

*dʌn/né, dʌnê'* "person, man" (cf. Chipewyan *de/ne, dûn/ne*; Carrier *tœne*)

*ts!ǎ/xe* "woman" (cf. Carrier *tşèkhè*; Kato *tc'ek*)

*dis/nê'* "male" (with -*nê* cf. probably -*nê* of *dʌnê'*)

*sǎ/sʌs* "white man"

*tsxǎ/xe* "child" (cf. Carrier *œzkhéhkhe*; Kato *skī-k* "boys, children")

*kéł/'è* "boy" (perhaps misheard for *k!éł/'è*; cf. Kato *k'il/lek* "boy")

*gǎ/yu* "baby"

BODY PART.

*na/γǎ* "eye" (cf. Hupa -*na*; Kato -*na*ᵉ; Chipewyan -*na/Ga*, -*na/Ge*)

ANIMALS.

θ<small>A</small>γ<small>A</small>ł "grizzly bear" (cf. Carrier sœs-e<sup>ł</sup>œł "brown or cross bear")

mís/k(!)i(') "gull" (cf. Kato bûtc/k'ai<sup>ε</sup>)

dís/ʟ!ac "fawn"

d<small>A</small>/mel'/ké "pelican"[35]

nat/q<sup>x</sup>i "duck" (cf. Kato nǻ<sup>a</sup>/q<sup>ʻ</sup>i[36])

mī/tc'ǻ/ts!<small>A</small>l/nī "deer"

t'e/q!ô/lĕc/l'e "mink"

sā'/w<small>A</small>s/ts!é "sandhill crane" (cf. Applegate Creek tcā'/-wác/tc(!)e)

tc!ał/tc!ús/dje "ruffled grouse, 'pheasant' "

θǻ/gi "kingfisher"

d<small>A</small>s/n<small>A</small>ł "red-shafted flicker"

tθ!<small>A</small>θ/nā/yał/tθ!óθ "hummingbird"

gī<sup>i</sup>c/tc!é "bluejay"

nā/ts!ŏ̆/łe "horned lark"

sŏ̆'s/ga/ga "robin"

ts!ā/ts!úk "wren"

k<small>A</small>sís "barn swallow"

ga/łał/'é "crow"

Many of these animal names, as well as some of those that follow, are probably descriptive verb forms that have become stereotyped.

PLANTS.

tc<small>A</small>/pǻ/yu "flower"[37]

mɨ/t!al/tθ<small>A</small>θ "arrow-wood"

ʟ!ō̆ʻ/dé "tar-weed" (probably compounded with Athabascan ʟ!ō̆ʻ "grass;" cf. Hupa Lō̆/da-itc "an herb")

tc!<small>A</small>ł/γat/ts!ĕ̆ "sunflower(?)"

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[35] This word is humorously used to refer to Democrats, Democrat and d<small>A</small>/mel'/ké exhibiting some similarity in sound.

[36] This form was obtained independently.

[37] This word is remarkable as containing p, a sound that is normally absent in Athabascan.

*dᴀl/si* "pine" (cf. Kato *dûl/tcīk* "yellow pine," from *-tcīk* "red")

*nằ/ʟ!e* "pine-nut"

*dᴀ/nᴀc* "manzanita" (cf. Hupa *din/nūw̱*; Kato *tûn/nûc* "manzanita berries;" Galice Creek *dé/rec*)

*mᴀt/tc!í* "cat-tail"

*cᴀc/dằʻ* "oak"

## CULTURE OBJECTS.

*xᴀnᴀθ* "canoe"

*át/tca* "pipe"

*tc!ᴀ/θᴀ/gᴀl* "sandstone arrow-shaft scraper"

*tᴀ/kᴀc* "bow" (probably *t'ᴀk/gᴀc*; cf. Kato *gǫc* "yew")

*ˣq!ằ/xᴀθ* "arrow"

*det/t!é* "arrow-point"

## ABSTRACT.

*tθ!ᴀθ/dằ* "story"

*yằ/wīs* "whistling" (cf. Carrier *yuyuz* "whistling," as noun)

*ts!ī/dé* "sickness" (used with possessive pronouns to indicate "to be sick")

Several animals are designated by words ending in *-tc'u*, an augmentative suffix, "big" (cf. Hupa and Kato animal and plant names in *-kyō* and *-tcō* respectively). Such are:

*łⁱ/tc'ù* "horse" (literally, "big dog;" cf. Chipewyan *ʟĩn/tcō*)

*xā'/tc'ú* "goose" (cf. Applegate Creek *k'ą'/tc'u*. These words are formed from Athabascan *xa*: Chipewyan *xa* "goose;" Kato *ka'*)

*dᴀc/tc'ú, des/tc'ú* "grouse" (cf. Kato *dûc/tcō, dûs/tcō* "grouse")

*t'ét/mō/tc'u* "pigeon"

*cu/dê'/tc'u* "bald eagle"

*θᴀθ/dᴀ/łi/tc'u* "owl"

*łi/tc!ê/tc'u* "red-headed woodpecker"

*ga/sằ'/tc'u* "raven"

Nouns ending in *-t!ī* or *-t!īni* denote "one who has so and so." *-ni* is, likely enough, related to *-ne* of *dʌn/né* "person;" *-ne* or *-n* is found in many Athabascan dialects as suffix denoting "person." Examples of *-t!ī(ni)* are:

*łī/t!ī/nì* "dog-owner"

*dȯ/at/t!ī/ni*, *dȯ/at/t!ī* "bachelor" (literally, "not-wife-having-person." *dō-* "not;" *at-*, i. e., *at!* "wife," cf. Hupa *ūt̹* "wife," Kato *at'* "sister")

Examples of noun compounds consisting of two noun stems are:

*θʌ/γá* "head-hair" (shortened from *θī* "head" and *-γa* "hair." Cf. Chipewyan *θī/ɢa*)

*ga/łał gwȧ/yu* "red-winged blackbird" (literally, "crow('s) brother-in-law." With this cf. Chipewyan *da/tsa/- tcel/le* "a small crow," literally, "crow younger-brother"[38]).

An example of a compound noun consisting of verb and noun is:

*ʌl/ʌ́z dʌn/ne* "sneezer" (literally, "he-sneezes person")

An example of a compound noun consisting of noun and adjective is:

*tc!ac ł/θó/ē* "bluebird" (literally, "bird blue")

A characteristic type of noun in Athabascan is formed by verbs which, while remaining strictly verbal in form, are used to refer to objects, in other words, are logically nouns. As has been already noted, several nouns of more than one syllable listed above as unanalyzable are doubtless, strictly speaking, verb forms. Quite clearly verbal in form are:

*nāθ/ʟ!ȯ* "paper" (cf. *nał/ʟ!ȯ* "he writes")

*q!wʌt/daθt/gʌc* "table-cloth" (literally, "it lies *or* is thrown

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[38] Goddard, *op. cit.*, p. 110.

down on top;" cf. Hupa -$k_2as$, i. e., -*gas*, "to throw,"
and *wes/kas* "it lay"[39])

*q!wʌt/tc!ʌt/djà* "table" (literally, "thereon it is eaten")
*mʌł/t'é/tc!ʌt/ts!ʌl/lec* "smoking materials" (literally, "there-
with it is smoked")

## NUMERALS.

1. *ła, łá^a/ca* (cf. Hupa ʟa; Kato ʟa/ha^ɛ)
2. *nȧ/xi* (cf. Hupa *nax*; Kato *nąk/ka^ɛ*); *nȧ/xi la* "two
   hands"
3. *t'ȧ/γi* (cf. Hupa *tak*, i.e. *t'ak!*; Kato *tak'*; Chipewyan
   *ta, ta/ɢe*
4. *dʌn/tc!i* (cf. Hupa *diñk*, i. e. *diŋk^y!*; Chipewyan
   *dĩ/ɢĩ*)
5. *sxô/lȧ* (cf. Hupa *tcwō/la*; Chipewyan *sa/sō/la/ɢai^ɛ*)
6. *k'wʌs/t'ȧ/ne* (cf. Hupa *xōs/tan*)
7. *stc!ʌt/dé* (cf. Hupa *xō/kit*, i. e. *-k^y!it*)
8. *nā/xʌn/dō* ( ="it lacks two, two less")
9. *łán/dō* ( = "it lacks one, one less")
10. *hwê'/θe*

Of numeral adverbs there were recorded:

*łát/dʌn* "once" (cf. Hupa *na/diñ* "twice," *min/ʟûn/diñ*
   "ten times")
*ła/mé/q!e/ca* "in one time"

## ADJECTIVES.

Of adjectives, or verb stems with adjectival significance,
there have been found:

*wʌs/xé, wʌs/xȧ* "good;" *wʌs/xé łī* "dog is good"
*txʌs/xé/la* "rich" (-*la* is verbal suffix)
*dȧ/ʌn/dê* "bad" (evidently verbal in form. *dū-, dō-* is
   negative; -*dê* probably misheard for -*t!ê* "to be, exist;"
   cf. Hupa *ûn/ṭe*, i. e. *ʌn/t!e* "there is")

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[39] Goddard, *op. cit.*, p. 281.

*ʌL/tcā/γī* "big thing" (cf. Hupa *-kya/ō* "large;" Kato *-tcaG*)

*ł/gī* "white" (cf. Hupa *-L/kai*; Kato *-L/gai*)

*ła/cʌn* "black" (cf. Kato *-L/cûnᶜ*; Chipewyan *del/zûn*)

*ł/sʌk* "red" (cf. Kato *-L/tcīk*)

*ł/θo* "yellow, green" (cf. Hupa *Lit/tsō* "green;" Kato *-L/tsō* "blue")

"White," "black," "red," and "yellow, green" are characterized by prefixed *ł(a)-*, which is common as adjectival prefix also in other Athabascan dialects.

## ADVERBS.

Adverbs of place are:

*xun* "there" (cf. Hupa third personal pronoun *xōñ?*):
> *xún t'e/θi/ya* "there you go"
> *hīⁱ xún t'eθ/ya* "there he goes"

*txún/la* "where?":
> *txún/la t'e/θi/ya* "where are you going?"

*dō/dʌt* "nowhere" (cf. Hupa *-dit-* in *hai/dai/dit/diñ* "where;" *dō-* is negative)

*dʌk/gé* "up" (cf. Hare *tègè*):
> *dʌk/gé θicł/t'āt* "I kicked him up"

*mǎᵃ/dʌn* "on edge" (*-dʌn* is postposition "at;" *mā̆ᵃ-< *mą-< *maη-*; cf. Hupa *niL/man* "each side")

Adverbs of time are:

*xat* "then" (cf. Hupa *xat* "yet, right")

*xā* "quickly" (cf. Hupa *xa* "yet")

*xun/dé* "tomorrow" (cf. Hupa *yis/xûn/de* "tomorrow"):
> *xun/dé dō/wa/γʌc/ī* "I'll see him tomorrow"
> *xún/dè tθ!ʌθ/dā nʌł nácł/sī* "tomorrow story to-you I-shall-tell"
> *xun/dé t'ʌc/yʌc* "tomorrow I'll go")

*t'wĭ/dʌn* "always" (literally, "all-at"):

> *t'wĭ/dʌn t'ʌl/dʌc* "he always runs"
>
> *t'wĭ/dʌn ʌs/se* "I always cry"

*xʌʟ/ts!ĭ/dʌn* "this evening" (doubtless misheard for *xʌʟ!-*; *-dʌn* is postposition "at." Cf. Hupa *xû/ʟe* "in the night"):

> *xʌʟ/ts!ĭ/dʌn dō/wan/γʌc/ī* "I'll see you this evening"

Modal adverbs are:

*dō* negative (cf. Hupa *dō*):

> *dō/t'ʌc* "he won't go"
>
> *dō/t'ʌc/yic* "I'll not go"
>
> *dō/yȧ/t!a* "he won't fly"
>
> *dȯ/ʌs/se* "I'm not crying"
>
> *dō/nȧ/dʌcʟ/nic* "I'm not working"
>
> *dō/γʌc/ī* "I didn't see him"
>
> *dō/nécɬ/ī* "I'm not looking at him"
>
> *dȯ/ucʟ/t'e* "I do not want"
>
> *dō/na/γʌcɬ/xwī* "I do not vomit"

*ɬa* prohibitive:

> *ɬá* "don't!"
>
> *ɬá/t'ī/yic* "don't go!"
>
> *ɬa/γĭ/ī* "don't see him!"
>
> *ɬá/nā/xwil/ye* "don't play!"
>
> *ɬá/na/dit/t!ō* "don't bathe!"
>
> *ɬá/na/γat/xwĭ* "don't vomit!"

*dō/dȧ/q!e* "unable"

*dȯ/ʟʌn* "not much" (cf. Hupa *ʟʌn* "much," *dō/ʟʌn* "little")

*dō/wĭ/la* "of course" (cf. Hupa *dōñ* "it is," *he/dōñ* "at least")

*dō/ɬȧ* emphatic negative (really verbal in form, "to cease;" cf. Hupa *-lan*, *-lûñ* with negative prefix *dō-* "to quit, leave, desist"):

> *dō/ɬȧ c/γī/ī* "you didn't see me"

*cŏ<sup>u</sup>/djī* "all right" (cf. Hupa *nū/hwōñ/<sup>a</sup>x* "properly"?)
*cᴀł/q!we* "to be accustomed to":
>>> *cᴀł/q!wé na/dᴀct/t!ō* "I'm used to bathing"
*t!ī<sup>i</sup>/xun* "to keep on:"
>>> *t!ī<sup>i</sup>/xún ne/cᴀł/ī* "he keeps looking at me"
*θᴀk/gwe* "in fragments"
*hō* future prefix (more properly intentive):
>>> *hō/yā/γíc/t!a* "I'll fly"
>>> *hō/tc!ᴀsʟ/se* "he wants to cry"
>>> *hȯ/il/ī γit/lō* "stop laughing!"
*dō/wa* future prefix (probably with dubitative coloring):
>>> *dō/wa/c/γī/ī<sup>i</sup>/t'e* "you'll see me"
>>> *s/ts!ī/dé dō/wa/ᴀl/lê'* "I'll get sick" (literally, "my-sickness will-become")
>>> *dō/wa/nȧ/yan/nᴀł* "he will upset them"
>>> *dō/wa/łt'át/nᴀł* "they will go to pieces"

## POSTPOSITIONS.

Athabascan is characterized, among other features, by the use of a considerable number of postpositional elements of chiefly local force. They are appended to nouns or pronominal, numeral, or adverbial stems; less often to verb forms, in which case they have subordinating force. Chasta Costa examples are:

*-dᴀn* "at" (cf. Hupa *-diñ*):
>>> *xᴀʟ(!)/ts!i/dᴀn* "this evening"
>>> *t'wi/dᴀn* "everywhere" (literally, "all-at")
>>> *łát/dᴀn* "once" (cf. *ła-* "one")
>>> *mȧ<sup>a</sup>/dᴀn* "on edge"
>>> *ał/dᴀc/ni/dᴀn* "when I tell him" (literally, "I-tell-him at")[40]

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[40] Similarly in Hupa *-miʟ* "when," as verb suffix, is doubtless simply pronominal *-mi-* plus postposition *-ʟ* "with."

-ł "with, to" (cf. Hupa -L; Kato -L):

> xAnAθ/ł nác/xe "I paddle canoe" (literally, "canoe-
> with I-paddle")
>
> tθ!Áθ/dă nAł nácł/sī "I tell you story" (literally,
> "story you-with I-make")
>
> tθ!Áθ/dā cAł na/yésL/sī "he tells me story"
> (literally, "story me-with he-makes")
>
> mAł/t'é/tc!At/ts!Al/lec "wherewith it-is-smoked, ma-
> terials for smoking" (mA-ł- "therewith;" cf.
> Kato bûL "with it;" Hupa miL "with, in")

This same -ł is probably also found attached to verbal prefix
a- (used in verbs of saying):

> ał/dAc/nĭ/dAn "when I tell him" (cf. Hupa aL/-
> tcit/den/ne "he talked to")

-ts!An "toward" (cf. Hupa -tciñ "toward;" Kato -tc'ûñᵋ
"to, toward"):

> s/ts!An/na/'Ac "to-me he-will-bring-it"

-me "in" (cf. Hupa -me "in;" Kato -bīᵋ "in"):

> mAn/mé "in house"

-me/q!e "in, around in" (compounded of -me and -q!e;
cf. Chipewyan -k'e "on"):

> mAn/mé/q!e "around in house"
>
> ła/mé/q!e/ca "all in one time" (cf. ła, łă̆ᵃ/ca "one")

## Verbs.

As in other Athabascan dialects, the typical Chasta
Costa verb consists of one or more adverbial prefixes, which
may be followed in order by a deictic or third personal ele-
ment, a first modal prefix, a second modal element, a first or
second person subjective element, and a third modal element or
"class" sign; these, not all of which need of course be present,
are then followed by the verb stem itself. The stem often
ends the verb form, but may be followed by one or more enclitic
elements of modal or syntactic force. The verb form is fre-

quently preceded by an adverb or postposition which, while best considered as a non-integral part of the verb, forms a rather close syntactic unit with it. A pronominal object, if present, comes after an adverbial prefix but before a first modal element. Thus, the verb form $t'\bar{a}/\gamma\dot{a}/\theta\bar{o}t/n\bar{a}/h\bar{a}$ "do you (plur.) drink?" consists of seven elements: $t'\bar{a}$-, an adverbial prefix referring to water; $\gamma\bar{a}$-, a second adverbial element; $\theta$-, a second modal element of durative significance; $-\bar{o}$-, second person plural subjective pronominal element; $-t$-, a third modal element, probably intransitive in force; $-n\bar{a}$, verb stem "to drink;" and $-h\bar{a}$, an enclitic interrogative element. The various elements that go to make up verb forms will be taken up in the order indicated.

ADVERBIAL PREFIXES. $\bar{a}$-, $a$-, '$a$- used with verbs of saying, doing, and being (cf. Hupa and Kato $a$-):

> $\dot{a}/djʌn$ "he says"
> $at/dʌc/n\dot{i}/dʌn$ "when I tell him" (for $-t$-, see under Postpositions)
> $d\dot{o}/dʌt$ '$ʌn/t!e$ "there is not anywhere"

This $a$- is probably equivalent to an indefinite object, "something," indicating what is said or uttered without definitely referring to it. This comes out rather clearly on comparison with a form like $y\dot{u}/w\bar{i}s dʌct/n\bar{i}$ "I whistle" (literally, "whistling I-utter"), where no indefinite object $a$- is required, what is uttered being specifically referred to by $y\dot{u}/w\bar{i}s$ "whistling." That $a$- is somewhat in a class by itself as compared with other adverbial prefixes is indicated by its being followed in forms with indirect object by postpositive $-t$-.

$y\bar{a}$-, $ya$- "up (in the air)" (cf. Hupa $ya$-; Kato $ya^{\epsilon}$-):
> $y\bar{a}/\gamma\dot{ʌ}ct/gʌ\theta$ "I climb"
> $y\bar{a}/\gamma\dot{ʌ}\theta/\theta et$ "I threw"
> $y\bar{a}/\gamma\dot{i}c/t!a$ "I fly"

It is not clear what significance is to be attached to $ya$- in:
> $ya/dʌct/yʌc$ "I am ashamed"
> $ya/da/\gamma\dot{i}t/dja$ "we are ashamed"

*ye-* "into enclosed space (including mouth)" (cf. Hupa
     *ye'-*; Kato *ye'-, yī'-*)
          *ye/γát/ne/la* "he bit it"
*dā-, da-* "sitting or lying on something above ground"
     (cf. Hupa and Kato *da-*):
          *dā/θΛθ/dā* "I am sitting down"
          *dā/de/θíl/tθ!i* "we are sitting down"
          *dȧ/nΛc/t'ȧc* "I go to bed"
          *q!wΛt/daθt/gΛc* "it lies thrown down on top,"
               i. e. "table-cloth")
          *q!wΛt/dasʟ/nȧ* "it was lying on it"
*t'e-* "in the water" (cf. Hupa *te-*; Kato *te'-*):
          *t'é/Λn/γΛc/lΛł* "I am sinking in the water"
          *t'e/níc/lat* "I drown"
*t'ā-* referring to water (cf. Hupa and Kato *ta-*):
          *t'ā/γΛct/nā* "I drink"
*tc!e-* "across a stream" (cf. Hupa *tce-* "out of;" Kato
     *tc'e-* "out of;" Chipewyan *ts'e-* "used of approach
     to a body of water"):
          *tc!e/θít/t!ō* "I swim across"
*Λn-* implies disappearance or undoing (cf. Chipewyan
     *'a-, an-* "away," implies "desertion or abandonment"):
          *t'é/Λn/γΛc/lΛł* "I am sinking in the water"
          *dō/wá/Λn/nā/yan/nΛł* "he will upset them"
*an-* "back, hither" (cf. Chipewyan *'ã- 'an-, ai-* "back,
     toward home"):
          *an/γi/ał* "come here!"
*tc!ā-, tc!a-* of unknown significance (cf. Hupa *kya-*[41]):
          *tc!ā/sΛsʟ/se* "I cry" (cf. Hupa *kya/teʟ/tcwe* "she
               heard it cry")
          *tc!ásʟ/se* "he cries"
*se'-* used with verb of smiling:
          *sé'/γΛt/lō* "he smiles" (cf. *γΛt/lȯ* "he laughs")

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[41] Goddard lists forms in *kya-*, i. e., *kʸla-*, under *ky-;* see *op. cit.*, p. 90.   It seems better
however, to keep them apart.

*tc!ō-* of unknown significance (cf. Hupa *kyō-*[42]):

> *tc!ō/γít/siL/la* "he pointed with his finger"
>
> *né/tc!ūc/lec* "I'll bet you"[43]

*u-* of unknown significance (cf. Hupa verbs in *ō-*[44])

> *dǒ/ucL/t'e* "I do not want"
>
> *dé/ucL/t'e* "what I want"

*nā-, na-* indefinite movement on surface of ground or water; horizontality (cf. Hupa and Kato *na-*):

> *nʌn/náθ/yā/la* "he went around it"
>
> *s/ts!ʌn/na/'ʌc* "he'll bring (it) to me"
>
> *γʌn/na/ʌc/t'e* "he will bring here"
>
> *nā/nĭ/ʌn* "stop him!"
>
> *nǎ/γa* "is going about, living"
>
> *ł/t'ĭ γʌn/na/'à* "he brags" (literally, "high, important he-has")
>
> *nǎ/xwʌcL/yè* "I play"
>
> *nā/dʌcL/nic* "I work"
>
> *dō/wa/nǎ/yan/nʌł* "he will upset them"
>
> *nāc/L!ǒ* "I write"
>
> *xʌnʌθ/ł nác/xe* "I paddle canoe"
>
> *nac/t!ǒ* "I swim, bathe"
>
> *na/tc!íł/de* "you wash"
>
> *nǎ/dʌcł/dè* "I washed myself"
>
> *nā/dʌt/t!ō/t'e* "he'll bathe"
>
> *nā/xʌt/dʌl/eł* "they'll bathe"
>
> *tθ!ʌθ/dǎ cʌł nā/θĭl/sī* "story to-me you-told, caused"

*na-* "back again" (cf. Hupa and Kato *na-*), followed by third modal *-t-*:

> *na/γǎ/θʌθt/xwĭ* "I vomit"

*γʌn-* of uncertain significance (cf. Hupa *wîn-* "to pursue

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[42] Goddard lists forms in *kyō*, i. e., *kʸ!ō-*, under *ky-;* see *op. cit.*, p. 90.   Perhaps *kʸ!ō⁻* is compounded of *kʸ!-* and *ō-*.

[43] This *tc!ū-* is probably better explained as deictic *tc!-* followed by future imperative *ū-;* see note 86.

[44] Goddard, *op. cit.*, p. 115.

or seek something; to attempt something by persistent effort''):

> γÁn/na/Ác/t'e "he will bring here"
>
> ł/t'ĭ γAn/na/'à "he brags" (perhaps "important he-seeks-to-have")

*ne-* of unknown significance:

> nécł/ī "I'm looking at him" (cf. γe/θĭc/ī "I saw him")
>
> nés/ts!Ał/ī "I am seen"

*xw(A)-* of unknown significance:

> nå/xwAcL/yè "I play"
>
> xwÁcL/ī "I believe (it)"
>
> xwAn/né/θiL/ya "you win" (see under first modal *ne-*)

*γā- γa-*, (γ) refers apparently to "mouth":

> ye/γát/ne/la "he bit it" (γat- may, however, have been misheard for γAt-, with second modal γ-; see note 92)
>
> na/γå/θAθt/xwī "I vomit"
>
> łá/na/γat/xwī "don't vomit!"
>
> t'ā/γå/θit/nā "we drink"
>
> t'ā/γít/nā "you drink" (or is γ- here second modal prefix?

Verbal prefixes of local force which are doubtless primarily postpositions and which are prefixed to adverbial prefixes proper are:

*nAn-* "around" (cf. Hupa *-nat;* Kato *-na*):

> nAn/náθ/yā/la "he went around it"

*q!wAt-* "on, on top" (cf. Hupa *-kût* "on;" Kato *-k'wût'* "on"):

> q!wÁt/tc!At/dja "whereon one eats, table"
>
> q!wÁt/daθt/gÅc "it lies thrown down on top, table-cloth"
>
> q!wÁt/dasL/nà "it was lying on it"

DEICTIC PREFIXES. Under this head are grouped a small number of quasi-pronominal elements of third personal reference which regularly come after adverbial prefixes, if any of these are present. They cannot be grouped with first or second personal subjective elements, as their position is quite distinct from these; first and second modal prefixes may come between. Of deictic elements there have been found:

> *tc!*- denotes lack or indefiniteness of object of transitive verb
> . (cf. Hupa *k*-, *ky*-, i. e. *kʸ!*-; Kato *tc'*-[45]):
>> *tc!ᴀγ/γe/θíc/ya* "I eat" (i. e. without specific object being designated; cf. Hupa *yik/kyū̆/-wiñ/yan* "it ate")
>> *q!wᴀt/tc!ᴀt/dja* "whereon one eats, table"
>> *nȧ/tc!it/ʟ!ō* "you write" (cf. Hupa *na/kis/ʟōn*, i. e. *na/kʸ!is/ʟ!ōn* "she made baskets")
>> *nȧ/tc!ī/t!ō* "you swim, bathe"
>> *na/tc!ít/de* "you wash" (cf. Kato *teʻ/na/tc'ûs/dēɢ* "he washed it")
>> *tc!ᴀt/t'ít/θᴀt* "we wash ourselves" (cf. Hupa *wa/-kin/nin/seʟ* "it was heated through")
>> *mᴀt/t'é/tc!ᴀt/ts!ᴀl/lec* "wherewith it is smoked" (somewhat doubtful, as *tc!*- here follows first modal prefix *t'e*-; but see note 77)
>> *tc!ᴀ́t/t!ō* "he sucks" (cf. Kato *tc'iʟ/t'ōt* "[make] it suck")

It is possible that in this last example *tc!*- is third personal subjective (cf. Hupa *tc*-, i. e. *tc!*-; Kato *tc'*-, *ts'*-, *s'*-), as suggested by *ᴀct/t!ŏ* "I suck" with its lack of *tc!*- prefix. No other plausible case, however, of third personal subjective *tc!*- is available, so that its existence in Chasta Costa must be considered doubtful as yet.

Generally third person singular subjective forms are distinguished by the lack of any pronominal prefix, but in certain

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[45] Goddard, *op. cit.*, p. 51.

cases deictic elements are found which are clearly third personal (subjective) in value.   These are:

dj- (cf. Hupa tc-, i. e. tc!-; Kato tc'-, ts'-, s'-):
   ȧ/djʌn "he says" (verb-stem -n; cf. Hupa aʟ/-tcit/den/ne "he talked to them")
   djʌn/la "he says" (cf. Hupa tcin "they say;" Kato tc'in)

It is quite likely, however, that djʌn is to be explained as from *dyʌn (dy, as we have seen, becomes dj), in which d- is first modal prefix (cf. dï/nī "you make a sound") and *yʌn is reduced from *yen (ye- as below; -n to say).

ye-, ya- (cf. Hupa y-, yī- referring to other than adult Hupa; Kato yī-):
   nʌł na/yéʟ/sī "to-you he-tells" (contrast nácł/sī "I tell")
   cʌł na/yésʟ/sī "to-me he-tells" (with second modal prefix s-, θ-; contrast nā/θił/sī "you tell")
   ya/q!éθ/ya[46] "he eats" (contrast tc!ʌɣ/ɣe/θíc/ya "I eat")

x-:
   tc!é/xʌθ/t!ō "he swims across" (contrast tc!e/-θít/t!ō "you swim across")

This x- seems to have no parallel in Hupa or Kato (is it connected with third person objective xō- of Hupa, kw̲- of Kato?). Were it not that -t!ō "to swim, bathe" is used only of singular subjects, one might surmise that x- is really plural xʌ- (see below).

Among deictic elements are further to be reckoned certain prefixes that serve to indicate either plurality as such or more specifically third personal plurality.   These are:

ya- (cf. Hupa ya-; Kato ya˙-):
   yu̇/wīs ya/dił/nī "we whistle" (contrast yu̇/-wīs dʌcł/nī "I whistle")

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[46] q!e- was very likely misheard for ɣe-.

           *yŭ/wīs ya/dᴀɫ/nī* "they whistle" (contrast *yŭ/wīs dᴀɫ/nī* "he whistles")

*γā̆-, γa-:*

           *tc!a/γă̆/θil/se* "we cry" (contrast *tc!ā/sᴀ́sʟ/se* "I cry")

           *tc!a/γásʟ/se* "they are crying" (contrast *tc!ásʟ/se* "he cries")

           *tc!ā/γă̆l/se/tʻe* "you (pl.) will cry" (contrast *tc!ă̆l/se/tʻe* "you (sing.) will cry")

*xᴀ-* third person plural (apparently not found in either Hupa or Kato; but cf., without doubt, Chipewyan *he-* "used for dual or plural of verbs in third person"):

           *yā/xᴀγ/γɨ̆/t!a* "they fly" (*yā/γɨ̆/t!a* "it flies")

           *dō/yă̆/xᴀt/t!a* "they won't fly" (*dō/yă̆/t!a* "he won't fly")

           *xᴀs/sé/tʻe/ha* "will they cry?" (*ᴀs/sé/tʻe/ha* "will he cry?")

           *dō/xᴀ́s/se* "they're not crying" (*dŏ/ᴀs/se* "he's not crying")

           *nā/xᴀ́t/dᴀl/nic* "they work" (*nā/dᴀ́l/nic* "he works")

           *c/xᴀ/γéθ/ī* "they saw me" (*c/γéθ/ī* "he saw me")

           *na/xᴀt/da/γᴀ́l/eɫ* "they are bathing"

           *tʻé/ᴀn/xᴀγ/γᴀl/lᴀɫ* "they sink in the water" (*tʻé/ᴀn/γᴀl/lᴀɫ* "he sinks")

           *xᴀt/tʻᴀ́l/laɫ* "they are sleeping" (*tʻᴀ́l/laɫ* "he is sleeping")

           *dā/xᴀ́n/nᴀt/tʻᴀ̀c* "they went to bed" (*dă̆/nᴀt/tʻᴀ̀c* "he went to bed")

           *xᴀt/tʻᴀ́l/xwᴀθ* "they cough" (*tʻᴀ́l/xwᴀθ* "he coughs")

           *xᴀ/ᴀ́l/ᴀz* "they sneeze" (*ᴀl/ᴀ́z* "he sneezes")

FIRST MODAL PREFIXES. Under this term are comprised a small number of rather frequently occurring elements which regularly come after both adverbial prefixes and deictic elements, but precede another set of modal elements (second

modal prefixes) which are to be taken up shortly. Their meaning is rather colorless. Besides their position they have this peculiarity in common, that they lose their vowel in indefinite tense forms (such as have no second modal prefixes: θ-, γ-, or n-) and are thus reduced to single consonants. They are:

> t'e- (definite tenses), t'- (indefinite tenses) seems to indicate durative activity (cf. Hupa te-; Kato te-, t-):
>> t'e/θíc/ya "I go;" indefinite: dō/t'ᴀc/yic "I'll not go;" t'ī/yᴀc/t'e "you must go"
>> t'ᴀcʟ/dᴀc "I run" (indefinite)
>> tc!ᴀt/t'o̊/θᴀł "you (pl.) wash yourselves" (indefinite)
>> t'/γɨ/ī "he looks around" (indefinite; but see note 69)
>> t'e/θᴀθ/łał/la "I've been sleeping;" indefinite: t'ᴀc/łał "I'm sleeping"
>> t'ᴀcł/xwᴀθ "I cough" (indefinite)
>> mᴀł/t'é/tc!ᴀt/ts!ᴀl/lec "wherewith it is smoked" (as following tc!- is deictic, it is more likely that t'e- here is adverbial prefix, not first modal; see note 77).
> de- (definite tenses; da- before γ-), d- (indefinite tenses) meaning unknown (cf. Hupa d-, dū-; Kato de-, d-):
>> ał/dᴀc/nɨ/dᴀn "when I tell him" (indefinite)
>> yŭ/wīs dᴀcł/nī "I whistle" (indefinite)
>> c/na/γä dɨ̈/s'at' "my-eyes hurt" (definite; cf. Hupa dū/win/tcat "it got sick")
>> ná/da/γᴀcł/t!o̊ "I bathe;" indefinite: nā/dᴀcł/t!o̊'/t'è "I'll bathe"
>> na/da/γíl/êł "we are bathing;" indefinite: nā/díl/eł "we'll bathe"
>> nā/dᴀcʟ/nic "I work" (indefinite)
>> nȧ/dᴀcł/dè "I washed myself" (indefinite)
>> ya/dᴀcł/yᴀc "I am ashamed" (indefinite)
>> ya/da/γít/dja "we are ashamed" (definite)
>> dā/de/θíl/tθ!i "we are sitting down" (definite)

γe- (definite tenses), γ- (indefinite tenses) meaning unknown:

tc!ᴀγ/γe/θíc/ya "I eat"

ya/q!éθ/ya "he eats" (q!e- is probably misheard for γe-)

γe/θɨ̀/ī "you saw him;" indefinite: dō/wa/γī/ɨ̀/- t'e "you'll see him"

γéθt/lō "he breaks into laughter;" indefinite: γᴀ́t/lō "he laughs"

an/γɨ̀/aɫ "come on!"

This γe-, γ- should not be confused with second modal γ-, which will be taken up presently. Two first modal prefixes (t'- and γ-) occur in t'/γɨ̀/ī "he looks around;" that γ- is not second modal here is indicated by parallel definite forms with γe- (see γe/θɨ̀/ī above), further by weak form t'- of first prefix (definite tenses require t'e)[47]

ne- (definite tenses), n- (indefinite tenses) meaning unknown (cf. Hupa ne-, n-; Kato ne-, n-; Chipewyan ne-, nū-):

xwᴀn/né/θiʟ/ya "you win" (cf. Kato kûn/ne/sīʟ/- yan "you win")

dǎ/nᴀc/t'ᴀ̆c "I go to bed" (indefinite; cf. Hupa definite: tcin/nes/ten "he lay")

n/da' "it is, stays" (indefinite; cf. Kato definite: tc'n/nes/dai "he sat down")

nā/nᴀ́c/ᴀn "I stop him;" nā/nɨ̀/ᴀn "stop him!" (indefinite)

n/dō "it is not" (indefinite; cf. Kato n/dōᵋ/ye "there is none")

This ne-, n- is not to be confused with second modal n-, which occurs only in definite tenses.

SECOND MODAL PREFIXES. These comprise three consonantal elements (θ- or s-; γ-; and n-) which are used only in definite tenses and which have reference, as far as any definite

---

[47] Moreover, t'e- in definite tenses seems regularly followed by second modal θ-, not γ-. Yet -ī- of γī causes difficulty; see note 69.

significance is ascertainable at all, to what may be termed range or span of activity, but not to tense as such. $\theta$- ($s$- in certain forms) is durative or continuative in force (cf. first modal $t'e$-, which is regularly followed by $\theta$-); $n$- is cessative, marking the end of an activity or marking an activity which is conceived as the end point of a previous activity (e. g., "to come" as contrasted with durative "to go"); $\gamma$- is the most uncertain, being apparently inceptive or momentaneous in some cases, but clearly not so in others.[48] They are, it seems, mutually exclusive elements. In practice their use seems largely determined by the prefixes that precede. $n$- and $\gamma$- always begin their syllable, being completed either by -$\bar{\imath}$- ($< *-i\eta$-) or by subjective pronominal or by third modal elements, which are joined to them by means of -$i$- or inorganic -$A$-; $\theta$- ($s$-) is similarly joined to following subjective pronominal elements, if one is present, otherwise it forms part of the preceding syllable.

Examples illustrating $\theta$- ($s$- before $l$, $L$) are:

> $t'e/\theta\acute{\imath}c/ya$ "I go;" $t'\acute{e}\theta/ya$ "he goes" (cf. Hupa $te/s\bar{e}/yai$ "I went away")
>
> $nAn/n\acute{a}\theta/y\bar{a}/la$ "he went around it".
>
> $tc!A\gamma/\gamma e/\theta\acute{\imath}c/ya$ "I eat;" $ya/q!\acute{e}\theta/ya$ "he eats" (contrast Hupa $yik/ky\bar{u}/wi\tilde{n}/yan$ "it ate" with $w$-)
>
> $tc!e/\theta\acute{\imath}t/t!\bar{o}$ "you swim across" (contrast $na/da/\gamma\acute{\imath}t/t!\bar{o}$ "you bathe")
>
> $d\acute{a}\theta/d\bar{a}$ "he is sitting down" (cf. Hupa $sit/dai$ "he lived")
>
> $d\bar{a}/de/\theta\acute{\imath}l/t\theta!i$ "we are sitting down" (cf. Hupa $de/s\bar{o}L/tse/te$ "you will stay")
>
> $tc!\bar{a}/\theta\acute{\imath}l/se$ "you (sing.) cry" (contrast Hupa $win/tcw\bar{u}$ "you have cried")

---

[48] Goddard somewhat doubtfully assigns inceptive force to its Hupa cognate $w$-; in Kato its cognate $g$- seems clearly inceptive only in certain verbs; while in Chipewyan Goddard ascribes continuative value to $g$-. It would be worth while making a somewhat extended comparative study of the second modal prefixes of Athabascan, which form one of the most difficult but at the same time important chapters of its grammar.

γe/θíc/ī "I saw him" (cf. Hupa te/sūw̲/iñ "I am going to look")

nā/θit̲/sī "you told story" (cf. Hupa na/seʟ/tcwen "I made")

t'e/θi̱/lał/la "you've been sleeping" (cf. Hupa nit/te/sil/lal/le "you would go to sleep")

θícł/t'āł "I kicked him" (contrast Hupa ye/tcū/-wiʟ/taʟ "they landed" with w-)

na/γá̇/θit/xwi̱ "you vomit"

γe/θА́θt/lō "I break into laughter"

ʟå̇θ/ā́/la one was (= ʟā "one" plus θ/'ā/la; cf. Chipewyan ϑe/ʽā "was there")

q!wА́t/daθt/gᴧc "it lies thrown down on top, table-cloth" (cf. Hupa wes/kas "it lay")

q!wА́t/dasʟ/nà̇ "it was lying on it"

xwᴧn/né/θiʟ/ya "you win" (cf. Kato kûn/ne/-sīʟ/yan "I win")

Examples illustrating *n-* are:

níc/ya "I come" (cf. Hupa nei/yai "I came")

níc/dac "I dance" (cf. Kato nûc/dac "I will dance")

t'e/ni̱/lat "you drown" (cf. Kato tc'n/nûl/lat "it floated there")

Examples illustrating *γ-* are:

γi̱/dac "he dances" (cf. Kato tc'/gûn/dac/kwañ "he had danced")

yā/γА́cł/gᴧθ "I climb" (cf. Hupa ya/wiʟ/kas "he threw up")

yā/γi̱/t!a "it flies" (cf. Hupa na/win/ṭau "it will settle down")

ná/da/γᴧct/t!ŏ̇ "I bathe"

na/da/γíl/êł "we are bathing" (cf. Chipewyan nɪ/ī/ginʟ/ūʟ "take through the water")

> *t'é/ʌn/γʌc/lʌɫ* "I'm sinking in the water" (cf.
>     Hupa *da/na/wil/laʟ* "it was floating there")
> *γʌcʟ/ʌ́z* "I've been sneezing"
> *tc!ō/γít/siʟ/la* "he pointed with his finger"
> *ya/da/γít/dja* "we are ashamed"

SUBJECTIVE PRONOMINAL PREFIXES.  There are three persons and two numbers (singular and plural), making six persons in all.  The third persons, as we have seen, are indicated either by the absence of a pronominal element or by deictic prefixes which come between the adverbial prefixes and the first modal elements.  There thus remain four persons (first person singular and plural, second person singular and plural) for treatment here.  In the definite tenses the pronominal elements are appended to the second modal elements, with which they form a syllable, an inorganic *ʌ* or *i*, if necessary, serving to connect them.  In the indefinite tenses the pronominal elements are appended to whatever element (adverbial prefix, deictic element, or first modal prefix in reduced form) happens to precede them.  They never begin their syllable except in the comparatively small number of cases in which the verb form, indefinite in tense, has nothing preceding the pronominal element or, in the case of the third person, nothing preceding the third modal prefix or verb-stem.  When this happens, the second person singular and plural and the first person plural stand at the very beginning of the verb; the first and third persons singular, however, begin with an inorganic vowel *ʌ-*.

*First Person Singular -c-* (cf. Hupa *-w̲-*; Kato *-c-*; Chipewyan *-s-*):

> *t'e/θíc/ya* "I go"
> *θícʟ/t'ā́ɫ* "I kicked him"
> *níc/ya* "I come"
> *dắ/nʌc/t'ʌc* "I go to bed"
> *t'é/ʌn/γʌc/lʌɫ* "I am sinking in the water"
> *γʌ́ct/lō* "I laugh"

*yā/γÁcɫ/gᴀθ* "I climb"
*t'Ácʟ/dᴀc* "I run"
*nac/t!ŏ̇* "I swim, bathe"
*ᴀcɫ/t!ŏ̇* "I suck"
*ᴀcʟ/Áz* "I sneeze"

In definite tenses with *θ-* or *n-* as prefix the inorganic vowel connecting these elements with *-c-* is regularly *i*; this is evidently due to the palatal quality of the *-c-*. In definite tenses with *γ-* as prefix, however, the normal inorganic vowel, *ᴀ*, is found, due, no doubt, to the velar position of the prefix. In the indefinite tenses the connecting vowel, if required, is always *ᴀ*. Where we have *nᴀc-* we are dealing with first modal *ne-*, reduced to *n-*, plus *-c-*, not with second modal *n-* plus *-c-*; contrast definite *níc/ya* with indefinite *dȧ/nᴀc/t'ᴀ̀c*.

Before *s-* sibilants *-c-* is assimilated to *-s-*:

*dŏ̇/ᴀs/se* "I'm not crying" (< *ᴀc/se*)

*θic-* goes back to original *sic-* or *sᴀc-*. When *-c-* came to stand before a dental consonant (*d, t, l*), it was assimilated to *-s-*, and the inorganic vowel preceding it assumed the form *ᴀ*; this *sᴀs-* then regularly became *θᴀθ-*:

*dā/θÁθ/dā* "I am sitting"
*γe/θÁθt/lō* "I break into laughter"
*na/γȧ/θᴀθt/xwi̇* "I vomit"
*t'e/θÁθ/laɫ/la* "I've been sleeping"

Before third modal *-ɫ-*, *θic-* seems to be regularly retained (cf. *θícɫ/t'āɫ* above; *θícɫ/sī* "I make"). Secondary *sᴀs-*, not shifted to *θᴀθ-*, is found, however, before *ɫ(ʟ)* when this element is secondarily changed from third modal *-l-*:

*tc!ā/sᴀsʟ/se* "I cry"

That *sᴀsʟ-* here is equivalent to *sᴀsl-* < *sᴀcl-* is indicated by *tc!ā/θíl/se* "you cry;" contrast *θíɫ/t'āɫ* "you kicked him," *θícɫ/t'āɫ* "I kicked him."

It is to be carefully noted that -*c*- (or its reflexes -*s*-, -*θ*-) is in Chasta Costa found in both definite and indefinite tenses. There is no trace of an element corresponding to the Hupa -*e*- (-*ē*-), Kato -*ī*-, Chipewyan -*ī*-, which are found in forms of definite tenses. It is quite probable that the -*c*- of the indefinite forms was extended by analogy.

*Second Person Singular* *i*- (cf. Hupa -*ñ*-, i. e. -*ŋ*-; Kato -*n*-; Chipewyan *n*-, *ne*-, or nasalization of vowel:

> t'íl/dʌc "you run"
> t'ā/γít/nā "you drink"
> nå/tc!it/L!ō "you write"
> na/da/γít/t!ō "you bathe"
> nā/dít/t!ō/t'e "you'll bathe"
> yā/γíl/gʌθ "you climb"
> ya/díl/yac "you are ashamed"
> nā/θił/sī "you made, told"
> nā/xwíl/ye "you play"
> xwíl/ī "you believe it"
> xwʌn/né/θiʟ/ya "you win"
> t'íl/xwʌθ "you cough"

In all these cases the -*i*- connects a following third modal element (-*ł*-, -*l*-, or -*t*-) with a preceding prefix. Examples of -*i*- beginning its own syllable are:

> īl/ʌz "you sneeze"
> hå/il/ī "stop!"

If there is no third modal element, the -*i*-, lengthened to close -*ī*-, closes its syllable:

> dā/ni/t'ʌc "go to bed!"
> t'i/lał "you are sleeping"
> dā/θi/dā "you are sitting"
> yā/γi/t!a "you fly"
> då/ī/se "you do not cry"

This *i-*, *ī-*, is only secondarily the second person singular subjective element. The original element was doubtless -*η*- (cf. Hupa), which was reduced to nasalization of preceding vowels; the inorganic vowel, when nasalized, took on *i-* timbre Finally, when nasalization disappeared, the *i-* timbre alone remained as the reflex of original -*η*-. Where, in many indefinite tense forms, the nasalized vowel was other than an inorganic one, there was nothing left of the -*η*-:

>   *dō/yǎ/t!a* "you won't fly"
>   *nǎ/xe* "you paddle"
>   *néł/ī* "look at him!" (cf. *nécł/ī* "I'm looking at him")

In such cases the second person singular fell together with the third, as in *dō/yǎ/t!a* "he won't fly."

>   *First Person Plural* (*i*)*t-*[49] (cf. Hupa *it/d-*, *-d-*; Kato *d-*; Chipewyan *-t-*, *-d-*[50]):

>   *t'ít/łał* "we are sleeping"
>   *tc!ʌt/t'ít/θʌł* "we wash ourselves"
>   *t'e/nít/łat* "we drown"
>   *dā/nít/t'ʌc* "we went to bed"
>   *γe/θít/ī* "we saw him"
>   *yā/γít/t!a* "we fly"
>   *t'é/ʌn/γit/łʌł* "we are sinking in the water"
>   *dǒ/it/se* "we are not crying"

In Hupa and Kato regularly, and in Chipewyan often, the first person plural subjective pronominal prefix begins its syllable; in Chasta Costa it regularly ends its syllable, unless it has to stand at the beginning of the verb form, when it constitutes a syllable by itself (cf. *dǒ/it/se* above; *dō* "not" is independent adverb rather than prefix).

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[49] *t* is here unaspirated, and is thus etymologically identical with *d*.

[50] In Father Legoff's Montagnais paradigms -*id-* or -*it-* often, in fact regularly, appears; -*i-* seems, as in Chasta Costa, to be organic.

If the prefix preceding the pronominal element ends in a vowel, the -*i*- disappears:

$$d\bar{o}/y\acute{a}t/t!a \text{ ``we won't fly''}$$

This does not mean, however, that this -*i*- is to be considered an inorganic vowel, as is the case in Hupa *it/d*-. If -*it*- is followed by third modal -*t*-, both -*t*- elements combine into a single -*t*-, and all that is left of the pronominal prefix is the -*i*-:

$$t'\bar{a}/\gamma\grave{a}/\theta it/n\bar{a} \text{ ``we drink''} \quad (\text{contrast } t'\bar{a}/\gamma\acute{a}\theta t/n\bar{a}$$
$$\text{``they drink''})$$

If the third modal element is -ł- or -*l*-, -*t*- disappears and -ł- is changed to -*l*-; thus the first person plural of ł- verbs and *l*- verbs is always formed alike. In Hupa and Kato third modal -ł- regularly becomes -*l*-, but *d*- is preserved; hence Hupa *dil*-, Kato *dûl*-. In Chipewyan, however, as in Chasta Costa, -ł- not only becomes -*l*-, but -*t*- disappears. For Chasta Costa this means that the second person singular and first person plural of *l*- verbs is identical, provided, of course, that there is no deictic prefix of plurality in the latter and that the verb stem does not change for the plural. Examples of *l*-verbs are:

$$d\bar{a}/de/\theta\acute{i}l/t\theta!i \text{ ``we are sitting''} \quad (\text{cf. Chipewyan } de/\theta\bar{i}l/\theta'\bar{i}$$
$$\text{``we are sitting''})$$
$$n\bar{a}/d\dot{i}l/nic \text{ ``we work''} \quad (\text{cf. } n\bar{a}/d\dot{i}l/nic \text{ ``you work''})$$
$$t'\dot{i}l/xwʌ\theta \text{ ``we cough''} \quad (\text{cf. } t'\dot{i}l/xwʌ\theta \text{ ``you cough''})$$
$$n\bar{a}/xw\dot{i}l/ye \text{ ``let us play''} \quad (\text{cf. } n\bar{a}/xw\dot{i}l/ye \text{ ``you play''})$$
$$\bar{i}l/\acute{a}z \text{ ``we sneeze''} \quad (\text{cf. } \bar{i}l/\acute{a}z \text{ ``you sneeze''})$$
$$na/da/\gamma\acute{i}l/e\hbar \text{ ``we are bathing;''} \quad n\bar{a}/d\dot{i}l/e\hbar \text{ ``we'll bathe''}$$
$$tc!a/\gamma\grave{a}/\theta\dot{i}l/se \text{ ``we cry''} \quad (\text{cf. } tc!a/\theta\dot{i}l/se \text{ ``you cry''})$$

Examples of ł- verbs are:

$$y\dot{u}/w\bar{i}s \quad ya/dil/n\bar{i} \text{ ``we whistle''} \quad (\text{cf. third person plural:}$$
$$ya/d\acute{\Lambda}\hbar/n\bar{i})$$
$$n\grave{a}/tc!il/\text{L}!\bar{o} \text{ ``we write''} \quad (\text{cf. } n\grave{a}/tc!i\hbar/\text{L}!\bar{o} \text{ ``you write''})$$

If, in an indefinite tense form, the pronominal element is pre-
ceded by a prefix ending in a vowel and is, besides, followed by
third modal -*ł*- or -*l*-, both -*i*- and -*t*- have to disappear and
there is nothing left of the pronominal element except, in the
case of *ł*- verbs, the change of -*ł*- to -*l*-:

> *nél/ī* "let us look at him!" (cf. *néł/ī* "look at him!")
>
> *tc!ā/γél/se*, very likely misheard for *tc!ā/γál/se* "we'll cry"
> (cf. definite: *tc!a/γȧ̇/θil/se* "we cry")

> *Second Person Plural ō-* (cf. Hupa *ō'-*; Kato *ō'-*; Chipewyan
> *ō'-*):
>
> > *t'ȯ/łał* "ye sleep"
> >
> > *t'e/θȯ/łał* "ye have been sleeping"
> >
> > *t'e/nȯ/lat* "ye drown"
> >
> > *yā/γȯ/t!a* "ye fly"
> >
> > *t'é/ʌn/γō/lʌł* "ye sink in the water"
> >
> > *t'ā/γȧ̇/θōt/nā* "ye drink"
> >
> > *dȯ/ō/se* "ye are not crying"

No aspiration was heard after *ō* in Chasta Costa. This does
not seem due to faulty perception, as *l*- verbs keep their -*l*-
after *ō*-, whereas, under similar circumstances, Hupa, Kato,
and Chipewyan change -*l*- to -*ł*- (*ō'-l*- becomes *ōł-*). Indeed,
in Chasta Costa *ł*- verbs change their -*ł*- to -*l*- after second
person plural *ō*-. Examples of *ō*- before *l*- verbs are:

> *nā/dȯl/nic* "ye work"
>
> *na/da/γȯl/êł* "ye bathe;" *nā/dȯl/eł* "ye will bathe"
>
> *t'ȯl/xwʌθ* "ye cough"
>
> *nā/xōl/yé/le* "ye play" (for -*xwōl*-)
>
> *ōl/ʌz* "ye sneeze"

Examples of -*ł*- becoming -*l*- after *ō*- are:

> *ya/dȯl/nī* "ye utter, make a sound" (cf. third person plural
> *ya/dʌ́ł/nī*)
>
> *ne/xȯ/ōl/ī* "ye look at him" (cf. *néł/ī* "you're looking at
> him")

When, in an indefinite tense form, *ō-* is preceded by a prefix ending in *a*, *a* and *ō* contract to long *ā* (which, it would seem, remains long even in closed syllables):

> *dō/yȧ/t!a* "ye won't fly" (< *\*yaō'-*; cf. third person singular *dō/yȧ/t!a* with original *yā-*; and second person singular *dō/yȧ/t!a* < *\*yạ-* < *\*yaη*)
>
> *tc!ā/γȧl/se/t'e* "ye will cry" (cf. definite: *tc!a/γȧ/θōl/se* "ye cry;" and contrast *tc!ā/γál/se* "we'll cry" with short *-a-*)

*Third Person.* As already noted, the third person, apart from possible deictic prefixes, is marked by the absence of any pronominal element. If the element preceding the third modal prefix or the stem consists of a consonant which must begin its syllable, an inorganic *-A-* is found between the two; if a third modal prefix is absent, the syllable preceding the stem is closed by a consonant borrowed from the first consonant of the stem. Examples of third persons with *-A-* before a third modal prefix are:

> *ya/dAl/yAc* "he is ashamed"
> *t'Ál/dAc* "he runs"
> *nā/xwAl/ye* "he plays"
> *yā/γAl/gAθ* "he climbs"
> *yu̇/wīs dAɫ/nī* "he whistles"
> *t'ā/γAt/nā* "he drinks"

Examples of third persons with *-A-* followed by an inorganic consonant are:

> *dȧ/nAt/t'Ac* "he went to bed" (*-t-* is not third modal; cf. second person singular *dā/ni/t'Ac*)
> *t'é/An/γAl/lAɫ* "he is sinking in the water" (*-l-* is not third modal; cf. second person singular *t'é/An/γī/lAɫ*)

First modal *n-*, reduced from *ne-*, however, has in several cases been found without following inorganic vowel and consonant.

In such cases it closes the preceding syllable, which may even belong to another word. Examples are:

> dŏ/dᴀt 'ᴀn/t!e "not-anywhere there-is" (cf. Kato ɑn/t'ē "it is;" Hupa ûn/ṭe "there is")
>
> łán/dō "nine" (really ła n/dō "one is-lacking"); nā/xᴀn/dō "eight" (reduced from nȧ/xi n/dō "two are-lacking") (cf. Kato n/dōᵉ/bûñ "it will not be," but also nût/dōᵉ "all gone")
>
> cíc/mᴀnèn/dá' (=cĭ c/mᴀnè n/da') "I my-house is" (cf. Chipewyan ne/da "she sat")

If the verb form consists, properly speaking, of the stem alone, without prefix of any kind, an inorganic ᴀ- completed by a consonant that depends for its form on the first consonant of the stem is prefixed for the third person:

> ᴀs/sé/t'e "he must cry" (< *se/t'e; cf. dŏ/ᴀs/se "I'm not crying" < *ᴀc/se)
>
> dō/wa/ᴀl/lê' "he will become" (< *lê; dō/wa is adverb not influencing form of verb proper. That -l- is here no third modal element is shown by forms like Hupa ō/le "let him become")

This ᴀ- at the beginning of a third personal form appears also when the verb begins with a third modal element:

> ᴀl/ᴀ́z "he sneezes"

In this respect Chasta Costa differs from Kato, which need have nothing preceding the stem; with ᴀs/se compare Kato tceᵉ "he cried."

In the third person of definite tenses with second modal γ- or n- prefix this element is followed by -ī, in case there is no third modal prefix present. This goes back, without doubt, to nasalized -i- or -ᴀ-, in turn reduced from original -iŋ- (or -ᴀŋ-). This nasal element, characteristic of definite third personal forms (except such as have θ-, Athabascan s-, as second

modal prefix) is found also· in Hupa (-*iñ*-), Kato (-*ûn*-), and Chipewyan (-*n*-, -*in*-).    Examples are:

> *t'e/nĭ/laṭ* "he drowns" (cf. Kato *tc'n/nûl/laṭ* "it floated there," *nûl*- assimilated ·from *nûn*-;  *t'e/nĭ/laṭ* also "you drown")
>
> *γĭ/dac* "he dances" (cf. Kato *tc'/gûn/dac/kwañ* "he had danced")
>
> *yā/γĭ/t!a* "it flies" (cf. Hupa *na/win/ṭau* "it will settle down;" *yā/γĭ/t!a* also "it flies")
>
> *dĭⁱ/s'at'* "it pains" (*dĭⁱ*-< \**diη*-, contracted[51] from \**de/-γiη*-;  cf. Hupa *dū/win/tcat* "it got sick")

Rather hard to understand is:

> *t'é/ʌn/γʌl/lʌṭ* "he is sinking in the water"

One would have expected -*γī*-, not -*γʌl*- (as seen above, -*l*- is not third modal, but inorganic).    Is *γʌ*- reduced from first modal *γe*-, this form being indefinite in tense?

In Hupa this -*iñ*- does not seem to be found before third modal prefixes; in Chipewyan -*n*- (-*in*-) may, however, occur before -*ł*- and, as inferred from Father Legoff's Montagnais paradigms, also -*l*-.    As for Chasta Costa, what examples are available on this point show that -*i*- does not occur before -*l*- (e. g. *yā/γʌl/gʌθ* "he climbs").    For *ł*- verbs I have no safe example.    Before -*t*- it seems that -*i*- is present in some cases, not in others:

> *tc!ō/γĭt/siʟ/la* "he pointed with his finger"

but, without -*i*-:

> *na/da/γʌt/t!ō* "he is bathing"

On the whole, it seems possible that Athabascan -*ʌη*- (or -*ʌn*-) was originally a more freely movable element than it has

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[51] Parallel in form to Hupa verbs belonging to Class I, Conjugation 1 D, in which prefixed first modal *d*- or deictic *kʸ!*- contracts with -*iη*, *w*- (Athabascan *γ*-) being lost. See Goddard, *op. cit.*, p. 113.

become in e. g. Hupa, being required by certain verbs in their definite tenses, but not by others. This is suggested also by Father Legoff's Montagnais paradigms.

THIRD MODAL PREFIXES. There are three of these: -ɫ-, -l-, and -t-; they always complete a syllable immediately before the stem. -ɫ- is characteristic of many verbs which are either transitive or, at any rate, imply activity directed outward; in some cases, however, this significance is not obvious. As we have seen, this -ɫ- becomes -l- in the first and second persons plural. Examples of -ɫ-(-L-) are:

> θícɫ/t'āɫ "I kicked him"
> tθ!ʌθ/dà cʌt nā/θiɫ/sī "story to-me you-told, made"
> nécɫ/ī "I'm looking at him"
> năɫ/dè "he washes (something)"
> naɫ/L!ŏ "he writes"
> tc!ʌɫ/t!ō "he sucks"
> yŭ/wīs dʌɫ/nī "he whistles;" yŭ/wīs dʌcɫ/nī "I whistle"[52]
> xwʌn/né/θiL/ya "you win"

If nothing precedes this element, it seems (unlike -l-) to begin its word without preceding inorganic ʌ-:

> dō/wa/ɫ/t'áɫ/nʌɫ "they will be broken" (dō/wa is merely proclitic)
> ɫ/t'í "he is important"

Verbs in -l- are regularly intransitive; they denote states of mind or bodily activities that may be thought of as self-contained, not directed outwards. A reflexive meaning is sometimes apparent. After first person subjective -c- (-s-) it always appears as -ɫ-. Hence the first person singular, the first person plural, and the second person plural of -ɫ- verbs and l- verbs are always alike (but contrast θicɫ- < *sʌcɫ- with sʌsɫ- < *sʌcl-). As -l-, when standing after s, becomes -ɫ- also in the third person, the second person singular alone remains

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[52] This verb is irregular, inasmuch as -ɫ- does not occur in the second person singular: yŭ/wīs dī/nī "you whistle."

as an infallible criterion of whether a verb belongs to the *t*-class or *l*- class.   Examples of *-l-* are:

> *ya/dʌl/yʌc* "he is ashamed"
> *xwʌcʟ/ī* "I believe;" *xwil/i/ha* "do you expect?"
> *t'ʌl/dʌc* "he runs"
> *yā/γʌl/gʌθ* "he climbs"
> *nȧ/dʌl/dè* "he washed himself"
> *ʌl/ʌz* "he sneezes"
> *t'ʌl/xwʌθ* "he coughs"
> *na/xʌt/da/γʌl/eł* "they are bathing"
> *nā/xwʌl/ye* "he plays"
> *nā/dʌl/nic* "he works"
> *tc!ásʟ/se* "he cries;" *tc!ā/θíl/se* "you cry"
> *tc!ácʟ/se/t'e* "I'll cry;" *tc!ȧl/se/t'e* "you'll cry"
> *hȯ/γʌcʟ/ī* "I stop, cease;" *hȯ/il/ī* "stop!"

Verbs in *-t-* are also intransitive.   Examples are:

> *t'ā/γít/nā* "you drink"
> *ye/γát/ne/la* "he bit (it)"
> *tc!ō/γít/siʟ/la* "he pointed with his finger"
> *q!wʌt/daθt/gʌc* "it lies thrown down on top, table-cloth"
> *γʌct/lȯ* "I laugh" (*-t/lō* may, however, represent original Athabascan *-dlō* "to laugh")
> *ya/da/γít/dja* "we are ashamed"

There may be a passive significance in:

> *q!wʌt/tc!ʌt/dja* "whereon it is eaten, table"

With iterative *na-*:

> *na/γȧ/θʌθt/xwī* "I vomit"

VERB STEMS.   The stems that have been determined for Chasta Costa are:

> *-'ā,-'a* "to have position, to be" (cf. Hupa *-ai*, *-a*; Kato *-'aiᵋ*, *-'aᵋ*): *θ/'ā/la* "(one table) was"

-'*ʌc* "to bring" (cf. Hupa -*an*, -*ûñ*, -*auw̲* "to transport round objects"; Kato -*ʻą̃ñ*, -*ʻąc*): γ*ʌn*/*na*/'*ʌc* "he will bring it"

-'*ʌn* "to bring to a halt, stop" (perhaps another form of preceding stem): *nā*/*ní*/*ʌn* "stop him!"

-*ʌz* "to sneeze": *ʌcʟ*/*ʌ́z* "I sneeze"

-*ał* "to come" (cf. Chipewyan -*ʻas*, -*ʻaz*, -*ʻais* "to travel, used of two persons only"?) *an*/γ*í*/'*ał* "come on!"

-*êł*, -*eł* "to bathe (plur. subject)" (cf. Chipewyan -*el*, -*eʟ*, -*ūʟ* "to move on the surface of water"): *na*/*da*/γ*íl*/*êł* "we are bathing"

-'*ī* "to see, look at" (cf. Hupa -*en*, -*iñ*; Kato -*ʻīñʻ* "to look"): γ*e*/θ*íc*/*ī* "I saw him"

-*ī* "to stop, cease" (cf. Hupa -*en*, -*iñ* "to do, to act, to deport one's self"?): *hǒ*/γ*ʌcʟ*/*ī* "I stop (laughing)"

-*ī* "to believe, expect": *xwʌcʟ*/*ī* "I believe"

-*ya*, -*yʌc*, -*yic* "to go, come" (cf. Hupa -*yai*, -*ya*, -*yauw̲*; Kato -*yai*, -*ya*, -*yac*): *t'e*/θ*íc*/*ya* "I go;" *t'ʌc*/*yʌc*/*t'e* "I must go"

-*ya* "to eat" (cf. Hupa -*yan*, -*yûñ*, -*yauw̲*; Kato -*yanʻ* -*yīlʻ*): *tc!ʌ*γ/γ*e*/θ*íc*/*ya* "I eat;" *q!wʌt*/*tc!ʌt*/*dja*(<-*t*/*ya*) "whereon one eats, table"

-*ya* "to win" (cf. Kato -*yan*, "Kato Texts," p. 146, l. 13; not listed in "Elements of the Kato Language"): *xwʌn*/*né*/θ*iʟ*/*ya* "you win"

-*yan* "to upset" (cf. Kato -*yañ* "to clear off"?): *dō*/*wá*/*ʌn*/-*nā*/*yan*/*nʌł* "he will upset them"

-*ya*, -*yʌc* "to be ashamed" (cf. Kato -*yañ* "to be ashamed"): *ya*/*dʌ́l*/*yʌc* "he is ashamed;" *ya*/*da*/γ*ít*/*dja* (<-*t*/*ya*) "we are ashamed"

-*ye* "to play" (cf. Hupa -*ye* "to dance"): *nā*/*xwʌ́l*/*ye* "he plays"

-*łał* "to sleep" (cf. Hupa -*lal*, -*laʟ*; Kato -*lal*, -*łą̇ʟ*): *t'éθ*/-*łał*/*la* "he's been sleeping"

-*łʌł* "to sink in water;" -*lał* "to drown" (cf. Hupa -*lat*,

-*la* "to float"): *t'é/ʌn/γʌc/lʌɬ* "I am sinking;" *t'e/-níc/lat* "I drown"

-*lê* "to become" (cf. Hupa -*len*, -*liñ*, -*lū*, -*le*; Kato -*liñᵋ*, -*le*): *dō/wa/ʌl/lê'* "it will become"

-*lec* "to wager, bet": *né/tc!ūc/lec* "I'll bet you"

-*lec* "to smoke": *mʌɬ/t'é/tc!ʌt/ts!ʌl/léc* "wherewith it is smoked"

-*lō* "to laugh, smile" (cf. Chipewyan -*dlō*, -*dlōk'*): *γít/lō* "laugh!"

-*ʟ!ō* "to write" (cf. Hupa -*ʟōn*, -*ʟō*, -*ʟōw̲*, -*ʟoi* "to make baskets, to twine in basket-making;" Kato -*ʟōi*, -*ʟō*, -*ʟōn*): *naɬ/ʟ!ŏ̄* "he writes"

-*nā* "to drink" (cf. Hupa -*nan*, -*nûñ*; Kato -*nạn*): *t'ā/-γʌct/nā* "I drink"

-*nā* "to lie" (cf. Kato *nōʟ/tin/naᵋ* "were left"?): *q!wʌt/dasʟ/nä̀* "it was lying on it"

-*ne* "to bite, seize with one's teeth": *ye/γát/ne/la* "he bit it"

-*nī*, -*n* "to make a sound, to say" (cf. Hupa -*ne*, -*n* "to speak, to make a sound;" Kato -*nī*, -*ne*, -*n*, -*nec*, -*nīʟ*): *yǔ/wīs dʌɬ/nī* "he whistles;" *ä̀/djʌn* "he says"

-*nic* "to work": *nā/dʌl/nic* "he works" (cf. Montagnais -*ni* "exprime l'action des mains"[53]

-*θʌɬ* "to wash oneself (plur. subject)" (cf. Hupa -*sel*, -*seʟ* "to be or to become warm;" Kato -*sīl* "to steam," -*sûl*, -*sûʟ* "to be warm"): *tc!ʌt/t'ít/θʌɬ* "we wash ourselves"

-*θeɬ* "to throw": *yā/γi/θeɬ* "you threw"

-*se* "to cry" (cf. Hupa -*tcwū*, -*tcwe* "to cry, to weep;" Kato -*tceɢ*, -*tce'*): *tc!ásʟ/se* "he cries"

-*sī* "to cause" (cf. Hupa -*tcwen*, -*tcwiñ*, -*tcwe* "to make, to arrange, to cause;" Kato -*tcin*, -*tcī*, -*tcīʟ*): *nácɬ/sī* "I cause"

-*siɬ* "to point with one's finger": *tc!ō/γít/siʟ/la* "he pointed with his finger"

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[53] Father L. Legoff, "Grammaire de la Langue Montagnaise," p. 139.

-*da'*, -*dā* "to sit, stay" (cf. Hupa -*dai*, -*da*; Kato -*da*, -*dai*):
    *dā/θĭ/dā* "you are sitting"

-*dʌc* "to run" (cf. Hupa -*dʌl*, -*dʌL*, -*dauw̠* "to pass along,
    to go, to come;" Kato -*dac* "to travel"): *t'ʌ́l/dʌc*
    "he runs"

-*dac* "to dance" (cf. Kato -*dac* "to dance"): *nĭ/dac* "you
    dance"

-*de* "to wash (sing. subject)" (cf. Kato -*deɢ*, -*de'*): *nå̇/-
    dʌl/dè* "he washed himself"

-*t'āł* "to kick" (cf. Hupa -*taL*, -*tûl*, -*tûL*, -*tal* "to step, to
    kick;" Kato -*tal'*, -*tạL*): *θĭcł/t'āł* "I kicked him"

-*t'ʌc* "to lie down, go to bed" (cf. Hupa -*ten*, -*tiñ*, -*tūw̠* "to
    lie down;" Kato -*tin*, -*tûc*): *då̇/nʌc/t'ʌc* "I go to bed"

-*t'at* "to break, go to pieces" (cf. Chipewyan -*taL*, -*tûl* "to
    break"): *dō/wa/ł/t'át/nʌł* "they will be broken"

-*t'e* "to want" (cf. Hupa -*te* "to look for, to search after"?):
    *dȯ/ucL/t'e* "I do not want;" *dé/ucL/t'e* "what I want"

-*t'ĭ* "to be, make valuable" (cf. Carrier *tĭł/thĭ* "thou makest
    him valuable, treatest him as important"): *ł/t'ĭ*
    *γʌn/na/'à* "he brags"

-*t!a* "to fly" (cf. Hupa -*t̲au*; Kato -*t'aɢ*, -*t'a'*): *dō/yác/t!a*
    "I won't fly"

-*t!e* "to be of (that) sort" (cf. Hupa -*t̲e*; Kato -*t'e*): *dȯ/dʌt*
    *'ʌn/t!e* "there is not anywhere (one like him)"

-*t!ō* "to swim, bathe (sing. subject)": *nac/t!ȯ* "I swim,
    bathe"

-*t!ō* "to suck" (cf. Kato -*t'ōt*): *tc!ʌ́ł/t!ō* "he sucks"

-*tθ!i* "to sit (plur. subject)" (cf. Hupa -*tse*; Chipewyan
    -*θ'ĭ*): *dā/de/θĭl/tθ!i* "we are sitting"

-*ts!at* "to hurt, pain (intr.)" (cf. Hupa -*tcat*, -*tca* "to be
    sick, to become ill"): *dĭⁱ/s'at'* "(my eyes) hurt"

-*γa* "to go about, live" (cf. Hupa -*wai*, -*wa* "to go, to go
    about;" Kato -*ga*, -*gai*): *nå̇/γa* "he goes about, lives"

-*xe* "to paddle" (cf. Hupa -*xen*, -*xūw̠* "to float, used only
    of plural objects;" Kato -*ke'* "to bathe (plural only);"

Chipewyan -*kī* "to paddle a canoe, to travel by canoe"):
*nác/xe* "I paddle"

-*xwʌθ* "to cough" (cf. Kato *kōs* "cough," as noun;  Carrier
*xwœs*): *t'ʌl/xwʌθ* "he coughs"

-*xwī* "to vomit" (cf. Carrier *khu* "vomiting," as noun):
*na/γȧ/θʌθt/xwi̇* "I vomit"

-*gʌθ* "to climb" (cf. Hupa -*kas* "to throw"): *yā/γʌl/gʌθ*
"he climbs"

-*gʌc* "to throw"? (cf. Hupa -*kas* "to throw"): *q!wʌt/daθt/-*
*gʌc* "it lies thrown down on top, table-cloth"

It will be observed that several verb stems are restricted
in their use as regards number of subject (or object).  This
trait is characteristic of Athabascan, as also of other American
linguistic stocks.

DEFINITE AND INDEFINITE TENSES.  My material on
Chasta Costa is not full enough to enable me to give a satis-
factory idea of its tense-mode system.  It is clear, however,
that absolute time (present, past, future) is quite subordinate
to whether activities are thought of as taking place at some
definite time (generally present or past) or are more indefinite
as to time occurrence.  Indefinite forms are apt to be used
for general statements that apply irrespective of any particular
time, for future acts, for negative (particularly negative future)
acts, and regularly for imperative and prohibitive forms.  The
contrast between definite and indefinite present forms comes
out in:

definite: *ná/da/γʌct/t!ȯ* "I bathe" (i. e. am now engaged
   in bathing)
indefinite: *cʌt/q!we na/dʌct/t!ō* "I'm used to bathing"
   (here bathing is not restricted as to time)
definite: *tc!ā/sʌsʟ/se* "I cry"
indefinite: *t'wi̇/dʌn ʌs/se* "I always cry"
definite: *γéθt/lō* "he breaks into laughter" (i. e. laughs
   at one particular point of time)
indefinite: *γát/lō* "he laughs"

⎰ definite: xᴀł/t'é/łał/la "they have been sleeping" (may
⎱    be said of them at moment of waking up)
   indefinite: xᴀł/t'ᴀl/łał "they sleep"

Futures, as we shall see, are explicitly rendered by suffixing -t'e to present (generally indefinite) forms; but simple indefinite forms, particularly with adverbs pointing to future time, may often be used as futures in contrast to definite present forms. Examples are:

⎰ definite: na/da/γíl/êł "we are bathing"
⎱ indefinite: nā/díl/eł "we'll bathe"

⎰ definite tθ!ᴀ́θ/dᴀ̀ cᴀł na/θīł/sī "story to-me you-told"
⎱ indefinite: xún/dè tθ!ᴀθ/dā nᴀł nácł/sī "tomorrow story
    to-you I-tell"

⎰ definite: n/γe/θîc/ī "I saw you"
⎱ indefinite: xᴀʟ/ts!î/dᴀn dō/wan/γᴀc/ī "this-evening I'll-
    see-you"

⎰ definite: t'e/θíc/ya "I go"
⎱ indefinite: xun/dé t'ac/yᴀc "tomorrow I'll-go"

Negative presents or futures are regularly expressed by prefixing dō "not" to indefinite forms; when more explicitly future, -t'e is suffixed to them. Examples of indefinite forms preceded by dō are:

⎰ definite: tc!ac yā/γi/t!a "bird is-flying"
⎱ indefinite: dō/yà/t!a "he won't fly"

⎰ definite: na/γà/θᴀθt/xwî "I vomit"
⎱ indefinite: dō/na/γᴀ́ct/xwī "I do not vomit"

⎰ definite: tc!ā/sᴀ́sʟ/se "I cry;" tc!ā/θíl/se "you cry"
⎱ indefinite: dò/ᴀs/se "I'm not crying;" dò/ī/se "you're not
    crying"

⎰ definite: γe/θîc/ī "I saw him;" c/γe/θî/ī "you saw me"
⎱ indefinite: dō/γᴀ́c/ī "I didn't see him;" dō/là/c/γī/ī
    "you didn't see me"

⎰ definite: t'e/θíc/ya "I go;" t'éθ/ya "he goes"
⎱ indefinite: dō/t'ᴀ́c/yic "I'll not go;" dō/t'ᴀc "he won't
    go" (< *t'ᴀ/yᴀc)

Imperatives are simply second person subjective indefinite forms. Examples are:

γĭ/ī "see him!"   c/γĭ/ī "see me!"

néł/ī "look at him!" (identical with indefinite present: néł/ī "you're looking at him"); ne/cíł/ī "look at me!"

nā/nĭ/ʌn "stop him!"

Prohibitives are simply imperative forms preceded by ła:

ła/γĭ/ī "don't see him!"

First person plural indefinite forms may have hortatory significance:

nā/xwíl/ye "let us play!"

As regards form, definite tenses are primarily distinguished from indefinite tenses by the presence of second modal prefixes in the former, often also by the appearance of the first modal prefixes in a fuller form than in the latter; the presence of -ī- or -i- in certain third person definite forms may also be recalled. It seems, further, that certain adverbial prefixes which have a short vowel (even though in an open syllable) in definite forms lengthen it in corresponding indefinite forms:

definite: ná/da/γʌct/t!ŏ̀ "I bathe;" na/da/γít/t!ō "you bathe;" na/da/γʌ́t/t!ō "he's bathing"
indefinite: nā/dʌct/t!ŏ̀'/t'e "I'll bathe;" nā/dít/t!ō/t'e "you'll bathe;" nā/dʌ́t/t!ō/t'e "he'll bathe"

definite: na/da/γíl/êł "we are bathing;" na/da/γŏl/êł "ye are bathing;" na/xʌt/da/γʌ́l/eł "they are bathing"
indefinite: nā/díl/eł "we'll bathe;" nā/dŏl/eł "ye will bathe;" nā/xʌt/dʌ́l/eł "they'll bathe"

definite: tc!a/γǎ̇/θil/se "we cry;" tc!a/γǎ̇/θōl/se "ye cry"
indefinite: tc!ā/γál/se "we'll cry;" tc!ā/γǎl/se/t'e "ye will cry"

These changes of quantity, however, are doubtless only secondarily connected with change of tense, as indicated, e. g., by

*tc!ā-* in definite singular forms: *tc!ā/sᴀ́sʟ/se* "I cry;" *tc!ā/-*
*θíl/se/ha* "do you cry?" It is very likely that we are dealing
here primarily with considerations of syllabic and quantitative
rhythm or balance.[54]

In Hupa Goddard has exhaustively shown that verb stems
often assume different forms for different tenses and modes.
This is very likely also true to a considerable extent of Chasta
Costa, but I have but little material bearing on this point.
A quantitative change is found in:

{ definite *-êł*: *na/da/γíl/êł* "we are bathing"
{ indefinite *-eł*: *nā/díl/eł* "we'll bathe"

*-c* characterizes indefinite forms in:

{ definite *-ya*: *t'e/θíc/ya* "I go;" *t'e/θĭ/ya* "you go"
{ indefinite *-yᴀc*: *t'ᴀc/yᴀ́c/t'e* "I must go;" *t'ī̆/yᴀ́c/t'e* "you
   must go"
{ negative indefinite *-yic*: *dō/t'ᴀ́c/yic* "I'll not go;" *łá/t'ī̆/-*
   *yic* "don't go!"
{ definite *-ya*: *ya/da/γít/dja*(<*-t/ya*) "we are ashamed"
{ indefinite *-yᴀc*: *ya/dᴀ́cł/yᴀc* "I am ashamed"

PRONOMINAL OBJECTS. Pronominal objects are regularly
prefixed to the verb. They come before deictic and first modal
elements, but after adverbial prefixes. Thus, while not as
thoroughly immersed in the verb form as the subjective pro-
nominal elements, they cannot well be considered apart from
it. The third person singular object is not designated. In
form the objective elements are, on the whole, identical with
the possessive pronominal prefixes of the noun. They are:

Singular 1. *c-*          Plural 1. *nō-*
          2. *n-, ne-*             2. *nō-*
          3. ——                    3. *xō-*

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[54] Hardly stress accent as such. I cannot help feeling that such rhythmic phenomena
will turn out to be of fundamental importance for Athabascan generally.

"He—them" or "they—them" is expressed by means of $x\bar{\imath}$-. $c$- and $n$-, when standing at the beginning of a verb form, take no inorganic $A$- before them (contrast subjective $Ac$-).

The definite forms of $\gamma \acute{e}\theta/\bar{\imath}$ "he saw him" with combined pronominal subject and object are:

With first person singular object:

Sing. 2.  $c/\gamma e/\theta \dot{\imath}/\bar{\imath}$ "you saw    Plural 2.  $c/\gamma e/\theta \dot{o}/\bar{\imath}$
            me"

   3.  $c/\gamma \acute{e}\theta/\bar{\imath}$                    3.  $c/xA/\gamma \acute{e}\theta/\bar{\imath}$

With second person singular object:

Sing. 1.  $n/\gamma e/\theta \dot{\imath}c/\bar{\imath}$ "I saw    Plural 1.  $n/\gamma e/\theta \acute{\imath}t/\bar{\imath}$
            you"

   3.  $n/\gamma \acute{e}\theta/\bar{\imath}$                    3.  $n/xA/\gamma \acute{e}\theta/\bar{\imath}$

With first person plural object:

Sing. 2.  $n\bar{o}/\gamma e/\theta \dot{o}/\bar{\imath}$ "you saw  Plural 2.  $n\bar{o}/\gamma \acute{e}/\theta \bar{o}/\bar{\imath}$
            us"

   3.  $n\bar{o}/\gamma \acute{e}\theta/\bar{\imath}$                    3.  $n\bar{o}/xA/\gamma \acute{e}\theta/\bar{\imath}$

For $n\bar{o}/\gamma e/\theta \dot{o}/\bar{\imath}$ "you saw us" one would have expected $*n\bar{o}/$-$\gamma e/\theta \bar{\imath}/\bar{\imath}$. It seems that "ye saw us" has been extended in its usage to embrace also "you (sing.) saw us." It may indeed be that my data on this point rest on a misunderstanding, but there seems to be something analogous in Hupa. "You (sing.) are picking us up" would be expected in Hupa to be $*y\hat{u}n/n\bar{o}/$-$hil/l\bar{u}\underline{w}$ ($hil$- assimilated from $hi\tilde{n}$-). Instead of this form, however, Goddard lists $y\hat{u}n/n\bar{o}/h\bar{o}l/l\bar{u}\underline{w}$, which is not identical with but seems, as regards its second $\bar{o}$- vowel, to have been influenced by $y\hat{u}n/n\bar{o}/h\bar{o}/l\bar{u}\underline{w}$ "ye are picking us up."[55]

With second person plural object:

Sing. 1.  $n\bar{o}/\gamma e/\theta \dot{\imath}c/\bar{\imath}$ "I saw    Plural 1.  $n\bar{o}/\gamma e/\theta \acute{\imath}t/\bar{\imath}$
            you (pl.)"

   3.  $n\bar{o}/\gamma \acute{e}\theta/\bar{\imath}/la$                    3.  $n\bar{o}/xA/\gamma \acute{e}\theta/\bar{\imath}/la$

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[55] Goddard, *op. cit.*, p. 186.

With third person singular object:

Sing. 1. $\gamma e/\theta \dot{\imath} c/\bar{\imath}$ "I saw him" Plural 1. $\gamma e/\theta \acute{\imath} t/\bar{\imath}$
2. $\gamma e/\theta \dot{\imath}/\bar{\imath}$                   2. $\gamma e/\theta \dot{o}/\bar{\imath}$
3. $\gamma \acute{e}\theta/\bar{\imath}$                   3. $x\bar{\imath}/\gamma \acute{e}\theta/\bar{\imath}$

With third person plural object:

Sing. 1. $x\bar{o}/\gamma \acute{e}/\theta \bar{\imath} c/\bar{\imath}$ "I saw     Plural 1. $x\bar{o}/\gamma \acute{e}/\theta it/\bar{\imath}$ (heard
         them"                            also as $x\bar{o}/we$-)
2. $\gamma e/\theta \dot{o}/\bar{\imath}$                   2. $x\bar{o}/\gamma \acute{e}/\theta \bar{o}/\bar{\imath}$
3. $x\bar{\imath}/d_A/\gamma \acute{e}\theta/\bar{\imath}$            3. $x\bar{\imath}/\gamma \acute{e}\theta/\bar{\imath}/la$

Here again, one would have expected *$x\bar{o}/\gamma e/\theta \dot{\imath}/\bar{\imath}$ for "you (sing.) saw them." As it is, "you (pl.) saw him" seems to be used also for "you (sing.) saw them," both forms being logically parallel in that both involve a second person—third person relation, only one of the two persons, however, being plural. Objective forms of indefinite tenses of this verb are:

With first person singular object:

$d\bar{o}/wa/c/\gamma \bar{\imath}/\dot{\imath}^i/t'e$ "you'll see me"
$d\bar{o}/l\dot{a}/c/\gamma \bar{\imath}/\bar{\imath}$ "you didn't see me"
$c/\gamma \dot{\imath}/\bar{\imath}$ "see me!"
$c/\gamma a/\dot{\imath}^i/t'\bar{e}$ "he'll see me"

With second person singular object:

$d\bar{o}/wa/n/\gamma_A c/\bar{\imath}$ "I'll see you"

With third person singular object:

$d\bar{o}/wa/\gamma_A c/\bar{\imath}$ "I'll see him"
$d\bar{o}/\gamma_A c/\bar{\imath}$ "I didn't see him"
$d\bar{o}/\gamma_A c/\bar{\imath}/t'e$ "I won't see him"
$d\bar{o}/wa/\gamma \bar{\imath}/\dot{\imath}/t'e$ "you'll see him"
$\gamma \dot{\imath}/\bar{\imath}$ "see him!"
$\dot{t}a/\gamma \dot{\imath}/\bar{\imath}$ "don't see him!"

Objective forms of indefinite tenses of $ne-\dot{t}-'\bar{\imath}$ "to look at" are:

With first person singular object:

$ne/c\dot{\imath}\dot{t}/\bar{\imath}$ "look at me!"
$ne/c_A\dot{t}/\bar{\imath}$ "he looks at me"

With third person singular object:

> *nécɫ/ī* "I'm looking at him"
> *dō/nécɫ/ī* "I'm not looking at him"
> *néɫ/ī* "you're looking at him;" "look at him!"
> *nél/ī* "let's look at him!"
> *ne/xȯ/ōl/ī* "you (plur.) look at him"

This last form may, likely enough, have been mistranslated for "you (plur.) look at them" (cf. *xō/γé/θō/ī* above). Other forms with first person singular object are:

> *cᴀsɫ/sī* "he lets me, causes me to"
> *cᴀsɫ/t'ȧɫ* "he kicked me"

With second person singular object:

> *né/tc!ūc/lec* "I'll bet you"

PASSIVES. As in Hupa, pronominal subjects of passive verbs are objective in form. From *ne-ɫ-'ī* are formed:

| | |
|---|---|
| *nés/ts!ᴀɫ/ī* "I am seen" | *ne/nȯ/ts!ᴀɫ/ī* "we are seen" |
| *nén/ts!ᴀɫ/ī* "you are seen" | *ne/nȯ/ts!ᴀɫ/ī* "ye are seen" |
| *nê'/ts!ᴀɫ/ī* "he is seen" | *ne/xȯ/ts!ᴀɫ/ī* "they are seen" |

*ts!ᴀɫ-*, which appears in these forms, probably contains third modal *-ɫ-* preceded by deictic *ts!-* implying indefiniteness of logical subject: "man sieht mich." Apparently connected with this *ts!ᴀɫ-* is *ts!ᴀl-* in:

> *mᴀɫ/t'é/tc!ᴀt/ts!ᴀl/lec* "wherewith it is smoked, smoking utensils"

VERBAL SUFFIXES. A number of enclitic elements of temporal or modal significance are found rather loosely suffixed to verb forms. These, so far as illustrated in our material, are:

*-t'e* future particle (cf. Hupa *-te, -teʟ*; Kato *-teʟ, -tē/le*):

> *ᴀcʟ/ᴀ́z/t'e* "I shall sneeze"
> *t'ᴀc/láɫ/t'e* "I shall sleep"
> *nā/dᴀct/t!ȯ'/t'e* "I shall bathe"
> *nécɫ/ī/t'e* "I'll look at him"
> *dō/γᴀc/ī/t'e* "I won't see him"

> *nā/dÁcʟ/nic/tʻe* "I shall work"
> *dō/nȧ/dAcʟ/nic/tʻe* "I shall not work"
> *tc!ácʟ/se/tʻe* "I shall cry"
> *dō/Ás/se/tʻe* "I'll not cry"
> *tc!ȧl/se/tʻe* "you will cry"

*-tʻe* seems to imply obligation to some extent, as well as simple futurity, as is shown by its translation as "must" in some cases:

> *As/sé/tʻe* "he must cry"
> *tʻAc/yÁc/tʻe* "I must go"
> *tʻī/yÁc/tʻe* "you must go"

All forms with suffixed *-tʻe*, it will be noticed, are indefinite; none has been found that is definite.

> *-nAł* seems to be used for future acts:

> *dō/wá/An/nā/yan/nAł* "he will upset them"
> *dō/wa/ł/tʻát/nAł* "they will be broken, go to pieces"

> *-ha, -hā* interrogative:

> *nā/xwíl/ye/ha* "are you playing?"
> *tʻe/θȯ/lał/ha* "have ye been sleeping?"
> *nō/ɣe/θȯ/ī/ha* "did you see us?"
> *neł/ỉ/ha* "did you look at him?"
> *tc!ā/θíl/se/ha* "did you cry?"
> *dȯ/ō/se/ha* "are ye not crying?"
> *As/sé/tʻe/ha* "will he cry?"
> *tc!ā/ɣȧl/se/tʻe/ha* "will ye cry?"
> *tʻā/ɣít/nā/hā* "do you drink?"

*ha* seems to both precede and follow in:

> *ha/xwil/ỉ/ha* "do you expect?"

> *-la* probably inferential (cf. Hupa *-xō/lan, -xō/lûñ*):
> *tʻe/θÁθ/lał/la* "I've been sleeping" (said on waking up)
> *Lȧθ/ā/la* "there was one (table)"
> *txAs/xé/la* "(evidently) rich"

Probably also in:

<center>$d\bar{o}/w\dot{i}/la$ "of course"</center>

*-la* seems also to be used of simple narrative in past time, with very weak, if any, inferential force:

$tc!\bar{o}/\gamma\acute{i}t/si_L/la$ "he pointed with his finger"
$ye/\gamma\acute{a}t/ne/la$ "he bit it"
$n_An/n\acute{a}\theta/y\bar{a}/la$ "he went around it"
$n\bar{o}/\gamma\acute{e}\theta/\bar{\imath}/la$ "he saw you (plur.)" (cf. $n\bar{o}/\gamma\acute{e}\theta/\bar{\imath}$ "he saw us")
$n\bar{o}/x_A/\gamma\acute{e}\theta/\bar{\imath}/la$ "they saw you (plur.)" (cf. $n\bar{o}/x_A/\gamma\acute{e}\theta/\bar{\imath}$ "they saw us")
$x\bar{\imath}/\gamma\acute{e}\theta/\bar{\imath}/la$ "they saw them" (cf. $x\bar{\imath}/\gamma\acute{e}\theta/\bar{\imath}$ "they saw him")

I do not know whether the contrasts in person and number found in the last three pairs of forms are real or only apparent.

*-le* of unknown significance

<center>$n\bar{a}/x\bar{o}l/y\acute{e}/le$ "you (plur.) play"</center>

SYNTACTIC COMBINATION OF VERBS. Two verb forms sometimes combine syntactically, one depending on the other. The second verb is subordinate to the first in:

$d\dot{o}/uc_L/t\dot{e}$ $n\bar{a}/xw_{Ac_L}/ye$ "I-do-not-want I-play," i. e. "I don't want to play"
$h\dot{o}/\gamma_{Ac_L}/\bar{\imath}$ $\gamma_{Ac}t/l\bar{o}$ "I-stop I-laugh," i. e. "I stop laughing"
$h\dot{o}/il/\bar{\imath}$ $\gamma it/l\bar{o}$ "stop laugh!" i. e. "stop laughing!"
$ha/xwil/\dot{i}/ha$ $\gamma_{An}/na/\dot{Ac}$ "do-you-expect he-will bring?"

It seems that sometimes the first verb, which is then a third personal form, acts as a sort of complementary infinitive to the second:

$y\bar{a}/\gamma\dot{i}/t!a$ $\theta ic\dot{t}/s\bar{\imath}$ "he-flies I-make-him," i. e. "I let him fly"
$y\bar{a}/\gamma\dot{i}/t!a$ $c_{As}t/s\bar{\imath}$ "he-flies he makes-me," i. e. "he lets me fly"
$\dot{t}/t\dot{i}$ $\gamma_{An}/na/\dot{a}$ "he-is-important he-has-for(?)," i. e. "he brags about him"

# TEXT: THE GOOD DOG.[56]

| ł/t'í́[57] | γʌn/na/'à[58] | xá/dʌt[59] | lī/tc!é.[60] | dó̜/dʌt[61] |
|---|---|---|---|---|
| Make important | he has | his own | dog. | "Nowhere |
| 'ʌn/t!e[62] | ná/γa[63] | á/djʌn.[64] | dé/ucʟ/t'e[65] | hí́/t!i[66] |
| is like him | moves about," | he says. | "What I want | that thing |

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[56] Wolverton Orton claimed not to know any regular Chasta Costa myth texts. The following, which is merely an English joke anecdote taken from a popular periodical that happened to be lying about and translated into Chasta Costa by Mr. Orton, will at least serve to give some idea of Chasta Costa word order and sentence construction.

[57] *ł-*, third modal element. *-t'ī́*, verb stem. Cf. Carrier *tił/thî* "thou makest him valuable, treatest him as important."

[58] *γʌn-* and *na-*, adverbial prefixes. *-'a*, verb stem. For *na/'a-* "to have," cf. Hupa *naū/a/te* "you will have." "He has his dog made valuable, treated as important," i. e., "he brags about his dog." Indefinite tense, because statement is general and does not refer to any one point of time.

[59] *x-*, third personal pronominal element. *-ā/dʌt*, reflexive possessive element.

[60] Possessed form of *łī* "dog." Observe change of *ł-* to *l-*, and suffixing of *-tc!e*. Cf. Hupa *-liū/k(ᵞ!)e;* Chipewyan *ʟin/k'e.*

[61] *dó̜*, negative adverb. *-dʌt*, postpositive element.

[62] *'ʌ-*, reduced from *'a-*, prefix used with verbs of saying, doing, and being. It is probably equivalent to indefinite demonstrative: "(there is of) that (kind)." *-n-*, first modal element. *-t!e*, verb stem. Cf. Hupa *ûn/ṭe* "there is;" Kato *ạn/t'ē* "it is;" Chipewyan *ạn/t'e/hī/k'e* "it was." Indefinite tense, because statement is general.

[63] *nā-*, adverbial prefix. *-γa*, verb stem. "Moves about," i. e., "is living, is to be found": "there is no (dog) like him anywhere." Cf. Hupa *na/wa* "they were there;" Kato *na/ga/kwạn* "he had walked;" Navaho *na/ɢa*, i. e., *na/γa*, "he is going about" (quoted from Goddard, Analysis of Cold Lake Dialect, Chipewyan). Indefinite tense; general statement.

[64] *ā-*, prefix used with verb of saying; see note 62. *dj-*, third personal deictic prefix; or perhaps *djʌ-* = *\*dyʌ-*, reduced from *\*dye-*, first modal prefix *d-* and third person deictic prefix *ye-*. *-n*, verb stem. Probably definite in tense, though it shows no second modal prefix; cf. Hupa present definite third singular *a/den.*

[55] *de*, apparently relative in force. *u-*, adverbial prefix. *-c-*, first person singular subjective element. *-ʟ-*, third modal prefix. *-t'e*, verb stem. Indefinite tense; general statement.

[66] *hī*, demonstrative stem. *-t!i*, suffix applying, it would seem, to things. Perhaps *hī/t!i* is assimilated from *\*hī/t!a;* for *-t!a*, cf. Chipewyan *t!a* "that; often used to point out one of several persons or things characterized by a descriptive phrase or clause."

(335)

s/ts!ʌn/na/'ᴀ́c[67]    aɬ/dʌc/nɪ́/dʌn.[68]    dṓ    t'wī/dè[69]    ʟá    ā/djʌn.
  to me he brings         when I tell him."   "Not  everything,"  one    says.

ɬɪ́/t!i/nī[70]    mʌn/mé/q!e[71]    t'/ɣɪ́/ī.[72]    xat    q!wᴀ́t/tc!ᴀt/djà[73]
Dog-owner    around in house   he looked around. Then         table

ʟáθ/ā/la[74]    mʌn/mé[75]    wᴀs/xé    q!wᴀ́t/daθt/gᴀ̀c[76]    nāθ/ʟ!ṓ[77]
one there was    in house.     Good     table-cloth,       paper

hī    q!wᴀ́t/dasʟ/nà̃[78]    ī/ɣɪ́/tc'u[79]    mʌɬ/t'é/tc!ᴀt/ts!ʌl/léc.[80]
that    was lying thereon,    that        wherewith it is smoked.

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[67] *s-*, assimilated from *c-*, objective (or possessive) first person singular pronominal element. *-ts!ʌn*, postposition. *na-*, adverbial prefix. *-'ᴀc*, verb stem. Cf. Hupa *dō/-xō/liñ/na/ta/auw* "he won't carry." Indefinite tense; general statement.

[68] *a-*, as in notes 62 and 64. *-ɬ-*, postposition; refers to implied third person indirect object of verb. *-d-*, first modal prefix. *-c-*, as in note 65. *-nī*, verb stem. *-dʌn*, postposition; here used to subordinate verb. Cf. Hupa *ûn/niʟ/dū̲w̲/ne* "I am telling you." Indefinite tense; general statement.

[69] *t'wĭ*, pronominal stem denoting totality. *-de*, indefinite demonstrative stem.

[70] *ɬĭ* "dog." *-t!i/nī* "one who has;" evidently contains common Athabascan suffix *-n, -nī* "person."

[71] *mʌn* "house." *-me/q!e*, compound postposition.

[72] *t'-*, first modal prefix reduced from *t'e-*. *ɣī-*, first modal prefix *ɣ-* reduced from *ɣe-*, *-ī-* remaining unexplained. *-ĭ*, verb stem. According to this analysis, *t'/ɣĭ/ī* is indefinite in tense; this seems hard to understand, as it refers to one act in past time. Another analysis seems more likely: *t'-*, instead of or misheard for *t'e-*, form regularly used in definite tenses; *ɣ-*, second modal prefix; *-ī-*, definite third person ending for *ɣ-* verbs. Cf. Hupa *tcit/te/we/iñ/iɬ* "he looked about as he went along."

[73] *q!wᴀt-*, postposition "upon" used as adverbial prefix. *tc!-*, deictic prefix here indicating indefiniteness of object. *-t-*, third modal prefix presumably with passive force. *-dja*, from *-ya* after *-t-*, verb stem "to eat." "It is eaten thereon," i. e., "table."

[74] *ʟā*, numeral "one," to which verb proper, *θ/ā/la*, is attached. *θ-*, second modal prefix. *ā-*, verb stem. *-la*, verb suffix. Definite past tense, because referring to definite point of time in narrative. Cf. Chipewyan *ϑe/'ᵋā/hī/k'e/lai* "(lake) was there."

[75] *-me*, postposition.

[76] *q!wᴀt-*, as in note 73. *da-*, adverbial prefix. *θ-*, second modal prefix. *-t-*, third modal prefix. *-gᴀc*, verb stem. Verb form ("it lies thrown on top") used as noun.

[77] *nā-*, adverbial prefix. *θ-*, second modal element. *-ʟ!ō*, verb stem. Verb form ("whereon there is writing") used as noun.

[78] *q!wᴀt-*, as in note 73. *da-*, adverbial prefix. *s-*, second modal prefix. *-ʟ-*, third modal prefix; doubtless original *-l-* changed to *-ɬ-*, *-ʟ-*, because of preceding *s-*, which in turn is prevented by it from changing to *θ-*. *-nā*, verb stem. Definite past tense.

[79] Analysis uncertain, presumably demonstrative in force.

[80] *mʌɬ-* "therewith" consists of pronominal stem *m-* followed by postposition *-ɬ-*. *t'e-*, adverbial prefix. *tc!-*, deictic prefix indicating indefiniteness of object. *-t-*, consonant borrowed from following *-ts!*, to complete syllable begun by *tc!-*. *ts!ʌl-*, apparently passive in force. *-lec*, verb stem. Verb form used as noun: "smoking materials."

txᴀs/xé/la[81]   dó/at/t!ī.[82]   q!wát/tc!ᴀt/djā   xá̆   s/ts!ᴀn/na/ᴀ́c
He was rich         bachelor.              "Table          quickly   he'll bring to me,"

djᴀ́n/la[83]   łī/t!ī/ni.   dó/ʟᴀn[84]   xwᴀcʟ/ī[85]   djᴀ́n/la   dú̆/at/t!ī/nī̆.
said           dog-owner.   "Not much   I believe it,"   said         bachelor.

né/tc!ūc/lec.[86]   có̆ᵘ/djī.[87]   an/γí/aʟ[88]   djᴀ́n/la   łī́/t!ī/ni   tc!ō/γít-
"I'll bet you."     "All right!"   "Come here!"   said      dog-owner,   he pointed

/siʟ/la[89]   łī   q!wát/tc!at/dja   łát/dᴀn[90]   nᴀn/ná̆θ/yā/la[91]
with his finger. Dog     table           once           he went around.

xat   ye/γát/ne/la[92]   má̆ᵃ/dᴀn.[93]   łá̆   djᴀ́n/la   dó/at/t!ī/ni
Then      he bit it            at edge.     "Don't!"   said         bachelor,

t'wī/dé dō/wa/ná̆/yan/nał.[94]   dō/wí/la[95]   djᴀ́n/la q!wát/tc!ᴀt/dja
"everything       he will upset."        "Of course,"   he said,            "table

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[81] *txᴀs/xe*, adjective stem "rich;" perhaps related to *wᴀs/xe* "good." *-la*, verb suffix of probably inferential value.

[82] *dō*, negative.   *at = at!* "wife."   *-t!ī*, noun suffix denoting "one who has." "One who has no wife," i. e., "bachelor."

[83] *djᴀn*, as in note 64.   *-la*, verb suffix.

[84] *dō*, negative.   *ʟᴀn*, adverb "much."

[85] *xw-*, adverbial prefix.   *-c-*, first person singular subjective pronominal element. *-ʟ-*, third modal prefix; from *-l-*, because of preceding *-c-* (cf. note 98).   *-ī*, verb stem. Indefinite present, negative adverb preceding.

[86] *ne-*, second person singular objective pronominal element.   *tc!ū-*, adverbial prefix; very likely really compound of deictic element *tc!-* (indicating lack of specified object, namely wager) and modal *ō-*, *ū-* denoting future imperative.   *-c-*, as in note 85.   *-lec*, verb stem.   Indefinite present, because of future or slight hortatory meaning: "let me bet with you!"   Cf. Chipewyan *tūs/be* "let me swim."

[87] With *có̆ᵘ-*, cf. Hupa *-hw̲ōñ* "good;" Kato *-cōñ* "to be good."

[88] *an-*, adverbial prefix.   *γ-*, first modal prefix.   *-ī-*, second person subjective pronominal element.   *-aʟ*, verb stem.   Indefinite tense, used as imperative.

[89] *tc!ō-*, adverbial prefix; perhaps compound of deictic element *tc!-* (object pointed out is not specified) and first modal *ō-* of unknown significance.   *γ-*, second modal prefix. *-i-*, connecting element between second and third modal elements, characteristic of third person of definite tenses with *γ-*.   *-t-*, third modal prefix.   *-siʟ*, verb stem.   *-la*, verb suffix.   Definite past; marks point in narrative.

[90] Numeral adverb of *la* "one."   *-dᴀn*, postposition.

[91] *nᴀn-* and *na-*, adverbial prefixes.   *-θ-*, second modal prefix.   *-yā*, verb stem.   *-la*, verb suffix.   Definite past; refers to definite point of time in narrative.

[92] *ye-*, adverbial prefix.   *γa-*, second adverbial prefix.   *-t-*, third modal prefix.   *-ne*, verb stem.   *-la*, verb suffix.   According to this analysis, this verb is indefinite in tense, which is difficult to understand.   More plausibly, *γat-* may be considered as misheard for *γᴀt-;* *γ-* second modal prefix.   In that case, it is definite past.

[93] *mā̆ᵃ-*, noun stem "edge."   *-dᴀn*, postposition.

[94] *dō/wa*, proclitic adverb indicating futurity, probably not with absolute certainty. *nā-*, adverbial prefix.   *-yan*, verb stem.   *-nał*, verb suffix.   Indefinite in tense, because future in meaning.

[95] Adverb containing inferential *-la*.

dō/wá/ʌn/nā/yan/nʌɬ[96]   t'wī/dé   dō/wa/ɬ/t'át/nʌɬ[97]   θʌk/gwé
he will upset,            everything   will go to pieces,        in fragments

s/ts!ʌn/na/Ác.   ha/xwil/í/ha[98]   Áʟ/tcā/γì[99]   γÁn/na/Ác[100]
he will bring to me.   Do you expect   big thing   he will bring here

ła/mé/q!e/ca.[101]   wʌs/xe   łí.   nā/ní/ʌn[102]   nā/ní/ʌn   djÁn/la
all in one time?   Good   dog."   "Stop him,   stop him!"   said

dô/at/t!ī/ni.   dŏ/dá/q!e[103]   nā/nác/ʌn[104]   djÁn/la   łí/t!ī/ni
bachelor.   "Unable   I stop him,"   said   dog-owner,

t'wī   γÁn/na/ʌc/t'e[105]   xwʌn/né/θiʟ/ya[106]   djÁn/la   dô/at/t!ī/ni.
"all   he will bring here."   "You win,"   said   bachelor

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[96] As in note 94, except that another adverbial prefix, ʌn-, is present.

[97] dō/wa and -nʌɬ, as in note 94.   ɬ-, third modal prefix.   -t'at, verb stem.

[98] ha, interrogative adverb.   xw-, adverbial prefix.   -i-, second person singular subjective pronominal element.   -i-, third modal prefix.   -ī, verb stem.   -ha, interrogative suffix.   Indefinite present in tense.

[99] ʌ-, of unknown significance.   ʟ-, prefix common to several adjectives.   -tcā/γī, adjective stem "big."

[100] γʌn- and na-, adverbial prefixes.   -ʌc, verb stem.   Indefinite tense, because pointing to future time.

[101] ła, numeral stem "one."   -me/q!e, compound postposition.   -ca, found also with ła alone: łá[a]/ca "one."

[102] nā-, adverbial prefix.   n-, first modal prefix.   -ī-, second person singular subjective pronominal element.   -ʌn, verb stem.   Imperative mode.

[103] Adverb containing negative dō-.   Perhaps -q!e is postposition (cf. -me/q!e).

[104] nā-, n-, and -ʌn, as in note 102.   -c-, first person singular subjective pronominal element.   Indefinite in tense, because of preceding negative adverb.

[105] As in note 100.   -t'e, future suffix; here used because idea of futurity is more explicit.

[106] xwʌn-, adverbial prefix.   ne-, first modal prefix.   θ-, second modal prefix.   -i-, second person singular subjective pronominal element.   -ʟ-, third modal prefix.   -ya, verb stem.   Definite present in tense.

# APPENDIX.

A few Galice Creek words were obtained from Mrs. Punzie, a few Applegate Creek words from Rogue River Jack. These two Athabascan dialects are probably practically identical. *ś* indicates something acoustically midway between *s* and *c*; *r* (tongue-tip trilled) and *l* occur as reflexes of Athabascan *n*; nasalization (indicated by ‘) seems to occur. *kʻ* and *kʻw* are found as contrasted with Chasta Costa *x* and *xw*.

## GALICE CREEK.

*ya'/kʻăs* "seeds (sp.?);" said to be called *bănax* or *bąyu* in Chinook Jargon

*tc!a/ba/ă/kʻwa's* "brush used for medicinal purposes (sp.?)"

*ʟ!ōʻ/dăi* "tar-weed" (cf. Chasta Costa *ʟ!ōʻ/dé*; Hupa *Lō/daitc*)

*yéł/γat/ts!ai/yě* "sunflower" (cf. Chasta Costa *tc!ʌł/γat/ts!ě*)

*gųs* "camass" (cf. Chasta Costa *gōθ*; Hupa *kos* "bulbs")

*dăl/si* "pine" (cf. Chasta Costa *dʌl/si*; Kato *dûl/tcīk*)

*lă /ʟ!i* "pine-nut" (cf. Chasta Costa *nă/ʟ!e*)

*dé/reś* "manzanita" (cf. Chasta Costa *dʌ/nʌc*; Hupa *din/nūw̲*; Kato *tûn/nûc*)

*má'/tś!i* "cat-tail" (cf. Chasta Costa *mʌt/tc!í*)

*śáś/da'* "oak" (cf. Chasta Costa *cʌc/dāʻ*)

*ł/dá/ge* "acorn" (perhaps misunderstood; cf. Kato *ʟ/taɢ* "black oaks")

## APPLEGATE CREEK.

*kʻą'/tcʻu* "goose" (cf. Chasta Costa *xā'/tcʻú*; Kato *kaʻ*)

*dʌc/tcʻù* "grouse" (cf. Chasta Costa *dʌc/tcʻú*; Kato *dʌc/-tcō*)

*dʌc/t'ê'/tcʻu* "bob-white, quail"

*k!ai'/díc/tca/wè* "ruffed grouse, pheasant"

*kʻán/ta/tcʻu* "pigeon" (cf. Kato *kwī/yīnt*)

*dō/s'ʌn/ts!a/ya* "screech-owl"

*sĭ/tc!e/les* "kingfisher"

*tc!ă/ke/di* "red-headed woodpecker"

*tcā'/wác/tc(!)e* "sandhill crane" (cf. Chasta Costa *sā'/wʌs/-ts!é*)